



# Hazardous Materials Shipping Guide





FedEx Ground Package Systems Inc. is committed to the safe transportation of hazardous materials. It is very important that each person engaged in the transportation of hazardous materials become thoroughly familiar with the Title 49CFR (Code of Federal Regulations). This guide is intended only to assist you in your preparation of hazardous materials shipped via FedEx Ground Package Systems Inc. It is the shipper's responsibility to ensure each hazardous material package is in compliance with applicable Department of Transportation (D.O.T.) regulations and FedEx Ground Package Systems Inc. requirements. Failure to comply with these regulations and requirements may subject the shipper and carrier to fines and penalties.

Due to the changing nature of D.O.T. regulations and other information, it is impossible to guarantee absolute accuracy of the material contained in this guide. FedEx Ground Package Systems Inc., therefore, cannot assume any responsibility for omissions, errors, misprinting, or ambiguity contained within this guide and shall not be held liable in any degree for any loss or injury caused by such omission or error presented in this publication.

The *FedEx Ground Hazardous Materials Shipping Guide* is intended to simplify Title 49 CFR. FedEx Ground Package Systems Inc. reserves the right to be more restrictive than the federal regulations (49 CFR). Customers should be thoroughly familiar with the applicable sections of this guide when shipping hazardous materials via FedEx Ground Package Systems Inc. This guide reflects current dockets under final rule published on or before January 1, 2006.

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# FedEx® Ground Shipping Hazardous Materials Guide

## FedEx Ground PROHIBITED HAZARDOUS MATERIALS

CLASS	NAME	LABEL CODE / LABEL
1.1	Explosives	1.1 / Explosive 1.1
1.2	Explosives	1.2 / Explosive 1.2
1.3	Explosives	1.3 / Explosive 1.3
1.5	Explosives	1.5 / Explosive 1.5
2.3	Poisonous Gas	2.3 / Poisonous Gas
4.2	Spontaneously Combustible Material	4.2 / Spontaneously Combustible
4.3 *	Dangerous When Wet	4.3 / Dangerous When Wet
6.1	Poisonous Materials (Inhalation Hazards)	6.1 / Poison
6.1 *	Poisonous Materials (Non-Inhalation Hazards)	6.1 / Poison
6.2	Infectious Substance	6.2 / Infectious Substance
7	Radioactive Material II and III	7 / Radioactive Yellow II & III

\* FedEx Ground will handle these materials only when packaged in special exempted packaging, or when packaged in accordance with D.O.T. exception 49 CFR 173.13.

**Important:** Based on the nature of the material or the D.O.T. shipping regulations, **FedEx Ground may not accept certain “acceptable” hazardous materials.** **Always**, refer to Column 9 of the FedEx Ground Hazardous Materials Table for additional restrictions.

## FedEx Ground ACCEPTABLE HAZARDOUS MATERIALS

CLASS	NAME	LABEL CODE / LABEL
1.4	Explosives	1.4 / Explosive 1.4
1.6	Explosives	1.6 / Explosive 1.6
2.1	Flammable Gas	2.1 / Flammable Gas
2.2	Non-Flammable Gas	2.2 / Non-Flammable Gas
3	Flammable Liquid	3 / Flammable Liquid
4.1	Flammable Solid	4.1 / Flammable Solid
5.1	Oxidizer	5.1 / Oxidizer
5.2	Organic Peroxide	5.2 / Organic Peroxide
7	Radioactive Material I	7 / Radioactive White I
8	Corrosive Material	8 / Corrosive
9	Miscellaneous Hazardous Materials	9 / Class 9
ORM-D	Consumer Commodity (ORM-D)	ORM-D/Consumer Commodity
ORM-D	Cartridges, small arms (ORM-D)	ORM-D/Cartridges, small arms

## **FedEx Ground Conditions and Requirements:**

### **General**

All packages containing hazardous materials must be properly classified, described, packaged, marked, labeled and in proper condition for transportation according to applicable DOT regulations and FedEx Ground requirements. FedEx Ground does not accept hazardous material packages prepared under the IATA/ICAO (International Air Transport Association/International Civil Aviation Organization) regulations.

All packages offered and prepared under a DOT Special Permit (DOT-SP) must provide a copy of the Special Permit paperwork to the accepting facility (origin terminal).

All shippers must be prepared to provide a copy of the Material Safety Data Sheet (MSDS) for their materials when requested by FedEx Ground.

### **Service**

- Shippers must be properly qualified through a FedEx Account Executive before offering hazardous material packages via FedEx Ground. Please contact FedEx Ground Customer Service at 1-800-GO-FEDEX (1-800-463-3339) for more information.
- Hazardous materials, including ORM-D, via FedEx Ground service are acceptable within the contiguous United States. Hazardous materials, including ORM-D materials, **cannot** be shipped to Alaska, Hawaii or Puerto Rico. Consumer Commodity ORM-Ds only, can be shipped into Canada. However, you cannot ship Cartridges, small arms or Cartridges, power devices to Canada.
- Call Tag service is not available for hazardous materials, except ORM-D's.
- Guaranteed service may not apply to packages not properly prepared in accordance with DOT regulations and FedEx Ground requirements.
- Hazardous material shipments, including ORM-D's, are not accepted at FedEx Express drop box locations, FedEx Kinko's Office and Print Centers, FedEx World Service Center locations, FedEx Authorized ShipCenters or any unstaffed FedEx locations.

## Material Restrictions

Refer to column 9 of the FedEx Ground Hazardous Materials Table for additional restrictions and requirements for specific hazardous materials.

FedEx Ground does not accept:

- Reportable quantities (RQ)
- Hazardous Waste
- Any material that is an “Inhalation Hazard”
- Fireworks
- Biohazards such as blood, urine, fluids and other noninfectious diagnostic specimens.

## Hazardous Materials Security

Shippers and carriers are required to develop and implement a security plan addressing risks related to the transportation of hazardous materials. FedEx Ground has a Security Plan in place and is in full compliance with this regulation, along with the security-training requirements specified in 49 CFR 172.704.

**Note:** Due to the sensitive nature of this information, we cannot make a copy of our security plan available to our customers.

## Packaging

All hazardous materials must be packaged in United Nations Performance Oriented Packaging (UN POP) except when non-specification packaging is authorized by the 49 CFR. All packaging must meet the requirements set out in 49 CFR 173.24 and 173.24a. Packaging that is not in new or “like new” condition will not be accepted. In addition, the following requirements apply:

- FedEx Ground requires Fiberboard “Non-Specification Packaging” or “Strong Outer Packaging” to meet the following requirements:
  - For packages weighing up to 20 lbs. the outer package minimum requirements will be a 200 lb. Bursting test or 32 Edge Crush test package.
  - For packages weighing 21-50 lbs. a 250 lb. Bursting test or 44 Edge Crush test will be required.
  - For packages weighing 51-70 lbs. the outer container must be 275 lb. Bursting test or 55 Edge Crush test.
- Hazardous materials cannot be shipped in any FedEx packaging.
- Class 2 cylinders must be placed inside an overpack (outer package) marked “OVERPACK.” Alternatively, if required by 49 CFR 173.301, the overpack

may be marked with a statement indicating that the “Inside (inner) packages comply with prescribed specifications.”

- Hazardous materials cannot be banded, strapped or taped to form a bundle.
- FedEx Ground does not accept pails or drums over 8 gallons (32 liters). All pails or drums must be UN POP. We will accept authorized pails or drums as single packaging, however an incompatible fee may apply to these shipments.
- We will accept up to three different hazardous materials inside one overpack provided the materials are compatible. The materials must be packaged separately then placed in one outer package and contain three different descriptions.
- We do not accept cryogenic liquids unless properly prepared and packaged under exception 49 CFR 173.320. FedEx Ground **does not accept** flammable (Class 2.1) cryogenic liquids.
- FedEx Ground does not accept radioactive fissile material unless properly prepared and packaged under exception 49 CFR 173.453.

Combination packaging containing hazardous materials cannot exceed the inner-container requirements. The maximum size, number and total weight of glass, plastic or metal inner containers allowed in any one package are listed below:

<b>Type of Container</b>	<b>Max. Unit Size</b>	<b>Max. No. of Units</b>	<b>Max. Volume per Carton</b>	<b>Max. Wt. (Net) per Package</b>
<b>Glass</b>	0.5 liters	12*	3L (12pt)	Net 25 lb.
	1.0 liter (1 qt.)	6	6L (6 qt.)	Net 25 lb.
	2.0 liters (1/2 gal.)	4	8L (2 gal.)	Net 25 lb.
	4.0 liters (1 gal.)	2	8L (2 gal.)	Net 25 lb.
<b>Plastic</b>	8L (2 gal.)	4*	16L (4 gal.)	Net 50 lb.
<b>Metal</b>	4.0 liters ( 1 gal.)	4*	16L (4 gal.)	Net 50 lb.
<ul style="list-style-type: none"> <li>• <b>Maximum number of units for unit size of less than 0.5L (1 pt.) glass and 4L (1 gal.) plastic or metal are not specified, however package cannot exceed the maximum volume or weight per package.</b></li> </ul>				

## ORM-D Shipments

**Cartridges, small arms (ORM-D):** Cartridges, small arms and cartridges, power devices which have been classed as a Division 1.4S explosive may be reclassified and offered for transportation as an ORM-D material when packaged in accordance with 49 CFR 173.63(b). Each package containing an ORM-D material must be marked on at least one side with the ORM-D marking. The proper shipping name of the material, **Cartridges, small arms or Cartridges, power devices**, as appropriate, must be marked above or before the ORM-D designation. No shipping paper (OP-900) or certification form (OP-950) is required for ORM-D materials transported via highway.

**FedEx Fact:** Cartridges, small arms or Cartridges, power device ORM-D materials are prohibited to Alaska, Hawaii, Puerto Rico, or Canada.

**Consumer commodity (ORM-D):** Hazardous materials that have been properly classed as a Consumer commodity (ORM-D) must be marked on at least one side with the ORM-D marking. The proper shipping name, **Consumer Commodity**, of the material must be marked above or before the ORM-D designation. No shipping paper (OP-900) or certification form (OP-950) is required for ORM-D materials transported via highway.

**FedEx Fact:** Consumer commodity ORM-D materials are prohibited to Alaska, Hawaii, or Puerto Rico. Consumer commodities are acceptable into Canada.

## Paint Shipments

**Paint or Paint related material:** FedEx Ground will only accept metal paint-type cans with friction fitted lids packaged and prepared in fiberboard under one of two types of packaging methods:

### **Option 1:**

- United Nations Performance Oriented Packaged (UNPOP).
- A retaining ring around the lid or:
  - For gallons, 6 lid clips
  - For quarts, 5 lid clips
  - For pints, 4 lid clips

**Option 2:** If authorized by 49 CFR §173.173 or limited quantity (Ltd. Qty.), the following packaging requirements must be met:

- Fiberboard packaging must meet the following requirements:



- For packages weighing up to 20 lbs. the outer package minimum requirements will be a 200 lb. Bursting test or 32 Edge Crush Test package.
- For packages weighing 21-50 lbs. a 250 lb. Bursting test or 44 Edge Crush Test will be required.
- For packages weighing 51-70 lbs. the outer container must be 275 lb. or 55 Edge Crush Test.
- Full partitions between the inner containers and box sides.
- Fiberboard padding above and below the inner containers.
- A retaining ring around the lid or:
  - For gallons 6 lid clips
  - For quarts 5 lid clips
  - For pints 4 lid clips
- Absorbent material is required to fill the void spaces.

## Radioactive Shipments

**Radioactive material:** FedEx Ground will only accept radioactive material, Type A quantity, in packaging required to be labeled RADIOACTIVE WHITE-I. FedEx Ground will not accept the RADIOACTIVE YELLOW II or YELLOW III hazard labels. If shipping a Radioactive material that requires the shipping paper (OP-900) and certification form (OP-950) the following information must appear in the "Type DOT Label(s) Required, Ltd. Qty., or Special Permit" section of both forms:

- The name of each radionuclide, abbreviations are permitted.
- The physical and chemical form.
- The activity in becquerels, gigabecquerels or terabecquerels, abbreviations are permitted.
- The name of the label: RADIOACTIVE WHITE-I
- The words "Fissile Excepted" if packaged is excepted under 49 CFR 173.453.

**FedEx Fact:** FedEx Ground does not accept Radioactive Fissile material unless properly prepared and packaged under exception 49 CFR 173.453.

**Radioactive material limited quantity (Ltd. Qty.):** Radioactive materials in excepted packages for limited quantities do not require the RADIOACTIVE WHITE-I hazard label, hazardous material shipping paper (OP-900) or certification form (OP-950). Radioactive packages in limited quantities must conform to 49 CFR 173.421. The outside of the inner packaging or, if there is not inner packaging the outside of the package itself must have "Radioactive" marked on the package. The outside of each package must be marked with the four digit UN identification number for the material preceded by the letter UN.

**Note:** Radioactive material meeting the definition of another hazard class or division cannot be transported or prepared under the limited quantity exceptions.

**\*\* IMPORTANT \*\***

**Note:** Immediate notification to the FedEx Ground Hazardous Materials Administration, PGH Safety Department, is required for incidents involving any damaged or leaking package containing a radioactive material (see 49 CFR 171.15 and 171.16)

## **Training**

Hazardous material training is required for all employees who perform a hazardous material function. It is the duty of each hazmat employer to comply with the training requirements listed in 49 CFR 172.704.

FedEx Ground offers hazardous materials training via the online ShipSafe.ShipSmart. Hazardous Materials Training Program. The training curriculum includes the following:

- Rules and Regulations (Ground Shipping only)
- Hazard Classes and Divisions
- Shipping Papers
- Packaging (Non-Bulk Only)
- Marking and Labeling
- ORM-D Classification

The course is available at [www.shipsafeshipsmart.com](http://www.shipsafeshipsmart.com) and is payable by credit card only. The cost for the class is \$150.00. A discount is available for groups of more than three students. To obtain a discount please call 1-800-762-3744, ext. 6753 or ext. 2539.

## **Material Exceptions**

### **Carbon Dioxide, solid (Dry Ice)**

Carbon Dioxide, solid or Dry Ice is not regulated as a hazardous material when shipped via highway transportation. Dry Ice is only regulated as a hazardous material when shipped via aircraft. However, caution should be considered when transporting large amounts of Dry Ice via highway.

Dry Ice used to refrigerate diagnostic specimens (BIO-HAZARDS), such as blood, urine, and tissues, are NOT ACCEPTED by FedEx Ground.

Dry Ice is not accepted to Alaska, Hawaii, Puerto Rico, or Canada.

## **Small Quantity Exceptions**

Hazardous materials that are less than 30 ml (1 ounce) may possibly be shipped as a small quantity. In order, to utilize the exception the package must be packaged and prepared according 49 CFR 173.4. Small quantities, when packaged and prepared under 49 CFR 173.4, do not require hazardous material shipping papers, certification forms, marking or labeling of the package. However, the outer package must be marked as “This package conforms to 49 CFR 173. 4.” Lithium batteries and cells are not eligible for this exception. The following requirements must be met:

- Materials are packaged under 49 CFR 173.4
- Less than 1 oz. per inner container
- Gross weight of the completed package can not to exceed 64 pounds.
- Package must be marked with statement “This package conforms to 49 CFR 173.4.”
- No shipping papers required
- No hazard labels or Identification markings

## **Lighters or Lighter Refills**

Lighters and lighter refills must be shipped as hazardous materials via FedEx Ground. FedEx Ground does not honor 49 CFR 173.308. Also, all Lighters and Lighter refills in accordance with special provision N10, must be approved and have the T-\*\*\* marked on the outer package and shipping papers.

## **Air bag inflators, or Air bag modules, or Seat-belt pretensions**

The manufacturer must submit each design type of air bag inflator, air bag module, or seat-belt pretensioner to the Associate Administrator for examination and testing. The manufacturer will receive written notification from the Associate Administrator that the device has been approved for transportation and assigned an EX number that must be listed on the shipping paper. When recycling an air bag inflator, air bag module, or seat-belt pretensioner, “Recycled” must be listed on the shipping paper after the basic description.

## **Lithium Batteries**

Lithium batteries and cells shipped in compliance with 49 CFR173.185 are not subject to the hazardous material regulations other than listed in that exception. Please note, lithium batteries shipped under the exception 49 CFR 173.185 (b) or (c) are required to mark packages of primary lithium batteries with the text, “PRIMARY LITHIUM BATTERIES – FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT.” This marking requirement applies to excepted packages being shipped by all modes of transportation.

Packages shipped under 49 CFR 173.185 (e) with shipping papers and the Class 9 diamond would not need the statement. The shipper is required make this determination.

### **Black/Smokeless Powder for Small Arms**

Black powder for small arms and Smokeless powder for small arms are very similar commodities. Both powders can be reclassified from Class 1 to Class 4.1, Flammable Solids. Furthermore, one vehicle cannot carry more than 100 lbs of Black powder for small arms or Smokeless powder for small arms at any given time.

### **Matches, safety**

Matches, safety (Class 4.1-Flammable Solid) may not be regulated as a hazardous material if packaged and prepared under certain conditions. The 49 CFR allows an exception to the hazardous material regulations. Matches, safety, when packaged and prepared under 49 CFR 173.186, do not require hazardous material shipping papers, certification forms or hazard diamond labels when properly prepared. The only requirements for the outside (outer) package would be to have the DOT Shipping Name and UN Identification Number marked on the package:

Matches, safety  
UN 1944

Refer to 49 CFR 173.186 for further details regarding matches.

### **Mercury**

Mercury (Class -8- Corrosive) may not be regulated as a hazardous material if packaged and prepared under certain conditions. 49 CFR allows an exception to the hazardous material regulations. Mercury, when packaged and prepared under 49 CFR 173.164, do not require hazardous material shipping papers, certification forms, marking or labeling of the package when:

- The mercury is contained in instruments or articles (i.e. thermometers, barometers or fluorescent lights *or*
- The package does not contain more than 1lb. (.45kg) net quantity of mercury per package

## **Qualification Process**

In order to ship hazardous materials via FedEx Ground, shippers must complete a qualification process before they can ship hazardous materials. To begin this process, contact your FedEx Account Executive who can assist you or call FedEx Customer Service at **1.800.GoFedEx (1.800.463.3339)**.

### **Qualification process:**

- Complete a hazardous materials qualification form (OP-910).
- Provide information on the hazardous materials you'll be tendering to FedEx Ground. You can complete a sample hazardous materials certification form (OP-950) or prepare a spreadsheet listing the hazardous materials you ship.
- Provide proof that you have been trained in shipping hazardous materials in accordance with federal requirements (49 CFR 172.704). Acceptable forms of proof are:
  1. A certificate from a training company stating that you have completed its program. This certificate must contain the date in which the course was completed.
  2. A letter on company letterhead indicating who is responsible for hazardous materials training at your company and confirming that your employees have received the required training.
  3. Completing the ShipSafe.ShipSmart. online hazardous materials training program.


Your FedEx Account Executive will forward this information to the FedEx Ground Safety Department for review and notify you once you've been approved to begin shipping.

# Hazardous Materials Shipping Papers

A hazardous materials shipping paper (OP-900, OP-900B, OP-900LG or OP-900LL) and hazardous material certification form (OP-950) are documents used to identify the hazardous materials package(s) being offered for transportation. It is the shipper's responsibility to ensure when offering hazardous material packages, that each package is accompanied with the appropriate documentation and that all forms are accurate and complete.

To meet DOT shipping paper and certification requirements, FedEx Ground uses the following forms:

- Shipper's Hazardous Materials Certification, OP-950:

		SHIPPER'S NAME & ADDRESS			SHIPPER NUMBER:		<b>EMERGENCY CONTACT NUMBER:</b> This telephone number is for emergency response information	
		DATE						
<b>HAZARDOUS MATERIALS CERTIFICATION</b> Abbreviations not permitted except where noted.		MARK ANY SPOILED SHEET "VOID" AND GIVE TO						
DOT SHIPPING NAME OF MATERIAL (Additional entries if applicable)	HAZARD CLASS OR DIVISION NUMBER	IDENTIFICATION NUMBER	PACKING GROUP	WEIGHT	TYPE DOT LABEL(S) REQUIRED OR LTD. QTY. OR SPECIAL PERMIT	RECEIVER'S NAME CITY & STATE	TRACKING I.D. BARCODE PACKAGE #	
1								
2								
3								
4								
5								
6								
THIS IS TO CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION. HAZARDOUS MATERIALS CAN ONLY BE SHIPPED WITHIN THE 48 CONTIGUOUS STATES VIA GROUND SERVICE. HAZARDOUS MATERIALS AND ORM-Ds ARE PROHIBITED FROM ALL AIR SHIPMENTS.							<b>1623951</b>	
							SIGNATURE _____	

**Note:** Shippers on automated devices (shipping systems) will have similar forms. All forms must have the appropriate DOT and FedEx Ground shipping information.

• Hazardous Materials Label, OP-900:

**OP-900**

**HAZARDOUS MATERIALS**

FedEx Ground

HM

Instructions

To Shipper:

Complete all boxes. Press firmly with ball point pen. All copies must be readable. Remove backing and attach to package near shipping label.

To Loader:

Tear off copy & place in hazardous materials envelope.

To Driver:

Carry hazardous materials envelope (with these slips) in vehicle cab during transit.

SHIPPER: Use ball point pen and press firmly when preparing this form.

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**Note:** The OP-900 can be hand written and does not need to be computer generated.

• Hazardous Materials Label, OP-900LG:

24 HOUR EMERGENCY TELEPHONE NUMBER

PACKAGE REFERENCE

ACCOUNT NUMBER

FedEx Ground

Proper Shipping Name, Class or Division, UN Number or Identification Number, Packing Group (if required), all other required information, and mass/capacity.

RECEIVER

TRACKING NUMBER

LABELS

SHIPPER'S CERTIFICATION

SIGNATURE

THIS IS TO CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION. HAZARDOUS MATERIALS CAN ONLY BE SHIPPED WITHIN THE 48 CONTIGUOUS STATES VIA GROUND SERVICE. HAZARDOUS AND ORM-D'S ARE PROHIBITED FROM ALL AIR SHIPMENTS.

**Note:** The OP-900LG is designed to meet the specifications for specific hazardous material shipping systems. This form must be computer generated.

• **Hazardous Materials Label, OP-900LL:**

FedEx Ground offers a laser label OP-900 shipping paper. The label is placed into a pouch on the side of the package. The instructions for use are listed on the back of the laser label. In order to use the laser label software must be purchased for one of the vendors who offer this software. Please contact the vendor's listed below directly to purchase this software.

DANGEROUS GOODS COUNCIL  
1-800-652-9959  
[www.hazshipper.com](http://www.hazshipper.com)

LABELMASTER  
1-800-621-5808  
[www.labelmaster.com](http://www.labelmaster.com)

LABELMASTER SOFTWARE  
1-800-578-4955  
[www.labelmaster.com/software](http://www.labelmaster.com/software)



**Note:** The OP-900LL must be computer generated.



## DOT Basic Description for Hazardous Materials

### Basic Information:

The description of the hazardous material information on the shipping papers (OP-900) and certification form (OP-950) must be as described in accordance to DOT regulations. There are eleven (11) basic items required on shipping papers accompanying hazardous materials packages. The shipper or the shipper's agent must supply this information. All entries on the shipping papers must be made printed legibly and in English. The shipping papers cannot contain unauthorized abbreviations or information. The eleven basic items are:

1. **Name and address of the shipper.**

**Note:** The shipper's name and address is not on the FedEx Ground Hazardous Materials Shipping Paper (OP-900). The shipper's address label on the package will suffice provided it identifies the shipper by name and address. The shippers information must be completed on the certification form (OP-950).

2. The **DOT proper shipping name** as listed in Column 2 of the Hazardous Materials Table. Abbreviations and codes are not acceptable.

**Note:** Words shown in italics are not part of the shipping name, but can be used to further describe the material. The words in italics are optional.

3. The **Hazard Class or Division** is listed numerically as shown in Column 3 of the Hazardous Materials Table. The subsidiary hazard must appear in parentheses following the primary hazard. Abbreviations and codes are not acceptable.

4. The **UN/NA identification number** is listed in Column 4 of the Hazardous Materials Table.

**Note:** The number must be preceded by the UN or NA prefix.

5. The **Packing Group**, if required (see Column 5 of the Hazardous Materials Table). Packing groups must be roman type numbers (ex. I, II, III). Classes 2, 7 and some Class 9 materials are not assigned packing groups.

6. The **total quantity (weight)** by mass, capacity or as otherwise appropriate for the hazardous material including the unit of measurement.

**Note:** FedEx Ground requests the quantity (weight) of hazardous material be indicated in pounds (lbs). This is to allow FedEx Ground the ability to tally the weight of hazardous material on a vehicle. Units of measure may be abbreviated.

The following abbreviations are authorized:

Ounce = oz.	Pound = lb.	Gram = g.	Kilogram = kg.
Gallon = gal.	Liter = L	Quart = qt.	Pint = pt.

**Conversions:**

1 kg. = 2.2 lb.	1 lb. = 0.454 kg.	1 kg = 1000 g.	1 lb. = 16 oz.
1 L. = 1.06 qt.	4 qt. = 1 gal.	1 qt. = 0.95 L.	1 gal. = 3.78 L.

**Note:** 1 Gallon of water weighs approximately 8 lbs.

7. The **Type DOT Label(s)** required from Column 6 of the Hazardous Materials Table. Abbreviations and codes are not acceptable.

**Note:** If a hazardous material requires more than one label on the package, all labels must be entered on the shipping papers.

**Note:** Other information may be required. No label name is required if a Special Permit or exception is used.

**Note:** If NONE appears in column 6 of the Hazardous Materials Table, then no label is required and this section of the shipping paper may be left blank.

8. The **Consignee's (Recipient's) name and address.**

**Note:** The consignee's (recipient's) name and address is not on the FedEx Ground Hazardous Material Shipping Paper (OP-900). The shipper's address label will suffice provided it identifies the consignee (recipient) by name and address.

9. The **FedEx Ground barcode shipper and package number(s)** for the hazardous materials package(s).

10. The **Shipper's Certification** on the Shipper's Hazardous Materials Certification, OP-950, must be legibly signed by an authorized representative of the shipper.

**Note:** The signature may be hand written or computer generated.

11. **Emergency Response Telephone Number.**

**Note:** The emergency response telephone number section on the FedEx Ground Shippers Hazardous Materials Certification, OP-950, may be used only if

the telephone number applies to all hazardous materials package listed. If not, a separate telephone number must be indicated for each package. This must be a US number with English speaking representatives 24 hours per day.

#### Additional Description Information

1. If a hazardous material has a generic shipping name, the technical name of the hazardous component may be required to be entered in parentheses with the basic description. If the letter "G" appears in column 1 of the FedEx Ground Hazardous Material Table, a technical name is required.

For example: **Compound Cleaning Liquids (hydrochloric acid).**

2. If the hazardous material is a mixture or solution of two or more hazardous components, the technical names of at least two components most predominantly contributing to the hazard must be entered. If the letter "G" appears in column 1 of the FedEx Ground Hazardous Material Table, a technical name is required.

For example: **Flammable Liquids, corrosive, n.o.s. (Ethanol, Sodium Hydroxide).**

3. If the hazardous material meets the definition of a DOT Poison but the shipping name or hazard class does not indicate a Poison, the word "Poison" must be included on the shipping papers with the basic description. If the hazardous material has a N.O.S. generic shipping name, the technical name of the poison component must be entered in parentheses with the basic description. Materials, which pose an inhalation hazard, must have the notation "Poison Inhalation- Hazard Zone " entered on the shipping papers.

**Note:** FedEx Ground **does not** accept hazardous materials, which require the "Poison Inhalation Hazard Zone" labeling.

**Note:** FedEx Ground will only handle Poisonous materials if they are packed in an approved package that has been granted a DOT Special Permit (i.e., DOT-SP 9168) which precludes the requirements for a "Poison" or "Poison PG III" Label.

4. Hazardous Materials which are shipped in a package which has a DOT authorized packaging Special Permit must bear the additional description "DOT-SP" followed by the assigned special permit number.
5. Hazardous materials which are shipped under the EXCEPTION packaging rules in Column 8(a) of the Hazardous Materials Table may not be subject

to labeling (except for 6.1 materials) and placarding requirements; however, "Limited Quantity" or "Ltd. Qty." must appear on the shipping papers after the basic description.

6. A hazardous material, which is labeled "Dangerous When Wet", must have the same notation on the shipping papers.

**Note:** FedEx Ground will only handle "Dangerous When Wet" materials if packed in an approved package that has been granted a DOT Special Permit or exception, which precludes the placarding requirements.

7. A hazardous materials package that contains a reportable quantity of a hazardous substance must be identified with the letters "RQ" before or after the proper shipping name on the shipping papers. Please refer to the RQ section for the list of hazardous substances (RQ).

**Note:** FedEx Ground does not handle any hazardous material, containing a reportable quantity (RQ) of a hazardous substance.

8. Radioactive materials require additional shipping paper notations. Detailed information regarding shipping paper requirements for radioactive materials can be found in 49 CFR 172.203 (d) of the Hazardous Materials Regulations or in the Radioactive Shipments section of this guide.

## **Shipper Procedures for Hazardous Materials Documentation**

### **Shippers Hazardous Material Certification (Form OP-950)**

The Shipper's Hazardous Materials Certification, OP-950 is a two (2)-part form, which will be completed by the shipper and distributed as follows:

- The original (gray copy) will be given to the FedEx Ground driver on pickup to be returned to the facility. The driver will turn in the FedEx Ground copy of the OP-950 to the facility management to be filed in a Shipper's Hazardous Materials Certification file for 13 months.
- The copy (yellow copy) will be retained as the shipper's copy.

**Note:** The OP-950 must be complete, agree with the Hazardous Materials Table, contain no unauthorized abbreviations, and be signed by the shipper. If the OP-950 is not correct the shipment will be held until the paperwork is correct. A Shipper Error Notification (OP-908) may be faxed to the shipper in order to obtain the correct paperwork. (See example on the next page).

# HAZARDOUS MATERIAL SHIPPER ERROR NOTIFICATION

To: \_\_\_\_\_ Fax: \_\_\_\_\_

From FedEx: \_\_\_\_\_ Return Fax: \_\_\_\_\_

<b>FedEx</b> Ground HAZARDOUS MATERIALS CERTIFICATION		SHIPPER NAME AND ADDRESS <b>1</b>		SHIPPER NUMBER <b>2</b>		EMERGENCY CONTACT NUMBER <b>4</b>		
Abbreviations not permitted, except where noted		DATE <b>3</b>		MARK ANY SPOILED SHEET "VOID" AND GIVE TO DRIVER				
D.O.T. SHIPPING NAME OF MATERIAL (See Department of Transportation regulations)		HAZARD CLASS OR DIVISION NUMBER <b>7</b>	IDENTIFICATION NUMBER <b>8</b>	PACKING GROUP <b>9</b>	WEIGHT <b>10</b>	TYPE D.O.T. LABEL(S) REQUIRED OR LTD. QTY. OR EXEMPTION NUMBER <b>11</b>	RECEIVER'S NAME, CITY & STATE (Abbreviations permitted) <b>12</b>	TRACKING ID. <b>13</b>
<b>A</b>	<b>5</b>							
<b>B</b>	<b>6</b>							
<b>C</b>								
<b>D</b>								
<b>E</b>								
<b>F</b>								
THIS IS TO CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.							<b>14</b>	
HAZARDOUS MATERIALS CAN ONLY BE SHIPPED WITHIN THE 48 CONTIGUOUS STATES VIA GROUND SERVICE.							SIGNATURE _____	
HAZARDOUS MATERIALS AND ORM-Ds ARE PROHIBITED FROM ALL AIR SHIPMENTS.								


1. \_\_\_\_\_ The Shipper's name and address must be complete.
2. \_\_\_\_\_ The Shipper number must be the Ground account number or the Express account number.
3. \_\_\_\_\_ The date must be the date of pick-up.
4. \_\_\_\_\_ Shipper must provide a 24-hour emergency response telephone number (including area code) for use in the event of an emergency involving the HazMat listed.
5. \_\_\_\_\_ The proper shipping name must be the listed exactly as it is in the 49 CFR 172.101 Hazardous Materials Table – no misspelling or abbreviations.
6. \_\_\_\_\_ The technical name must be listed in parenthesis after the proper shipping name if there is a "G" in column 1 of the HazMat table.
7. \_\_\_\_\_ The hazard class must be listed numerically and the subsidiary hazard class, if applicable, must be listed in parenthesis after the primary hazard class.
8. \_\_\_\_\_ The identification number must include the UN or NA prefix and a 4-digit number and match the proper shipping name.
9. \_\_\_\_\_ The packing group must be listed as a Roman numeral I, II, or III. This can be left blank if not applicable.
10. \_\_\_\_\_ The weight must contain the number and the unit of measure, such as lbs. or gal.
11. \_\_\_\_\_ The type DOT labels listed in Column 6 of the HazMat table cannot be abbreviated. Additional information, such as Limited Quantity, DOT Special Permits, T-#, Ex-#, and CA-#s may be listed in this column.
12. \_\_\_\_\_ The receiver's name, street address, city, state, and zip must be listed here. Ditto marks are acceptable in this column only.
13. \_\_\_\_\_ List the tracking ID here – 15-digit for the total tracking ID number or the last 8 digits, which is the package number.
14. \_\_\_\_\_ An authorized representative of the shipper must legibly sign the Shipper's Certification on the Shipper's Hazardous Materials Certification, OP-950. The signature may be mechanically typed or computer generated.
15. \_\_\_\_\_ This is an incorrect or unauthorized form. Contact your account executive for an updated version.

Please make the necessary corrections to your original OP-950 and return by fax to the number listed above. The Department of Transportation regulations mandate that you maintain a copy of the shipping papers for 375 days. Your package may be held or delayed until the correct paperwork is received.

**Instructions for the use of the shipping papers (OP-900):**

The OP-900 is the basic Hazardous Materials Shipping Paper, which accompanies the hazardous materials shipment in transit. It consists of a multi-part label with five (5) "tear-off" parts. This form will be completed by the shipper and attached to the hazardous materials package. The hazardous materials entries on the form must agree exactly with the information on the Shipper's Hazardous Materials Certification and the mandatory marking and labeling information on the hazardous materials package.

**SAMPLE HAZARDOUS MATERIALS CERTIFICATION FORM (OP-950):**

 <b>HAZARDOUS MATERIALS CERTIFICATION</b> <small>Abbreviations not permitted except where noted.</small>		SHIPPER'S NAME & ADDRESS XYZ Chemical Co. 123 Steeles St. Pittsburgh, PA 15205			SHIPPER NUMBER: 1 2 3 4 5 6 7		EMERGENCY CONTACT NUMBER: 1-800-123-4567 <small>This telephone number is for emergency response information.</small>	
		DATE 12 / 15 / 05			MARK ANY SPOILED SHEET "VOID" AND GIVE TO			
DOT SHIPPING NAME OF MATERIAL <small>(Additional entries if applicable)</small>	HAZARD CLASS OR DIVISION NUMBER	IDENTIFICATION NUMBER	PACKING GROUP	WEIGHT	TYPE DOT LABEL(S) REQUIRED OR LTD. QTY. OR SPECIAL PERMIT	RECEIVER'S NAME CITY & STATE <small>(Abbreviations permitted)</small>	TRACKING I.D. BARCODE PACKAGE #	
1 Flammable Liquids, n.o.s. <small>(contains Methanol)</small>	3	UN 1993	III	25 lb.	Flammable Liquid	Jeff-Taylor Co. Herrington, WV 26169	12345678910111	
2 Primers, Cap Type	1.4B	UN 0378	II	10 lb.	Explosive 1.4B, EX#123456789	Lyles & Harper Co. Aston, PA 15108	12345678910111	
3 Toxic, liquids, organic, n.o.s. <small>(N-Methylaniline)</small>	6.1	UN 2294	III	16 oz.	DOT-SP 11248	Hanchutak-Withrow Christy, PA 15108	12345678910111	
4 Paint	3	UN 1263	II	32 oz.	Limited Quantity	BOSKO Corp. Humm City, PA 15108	12345678910111	
5 Flammable Liquid, Corrosive n.o.s. (contains Methanol and Potassium Hydroxide)	3 (8)	UN 2924	II	55 lb.	Flammable Liquid, Corrosive	Yeater Teams, Inc. Manns, OH 40222	12345678910111	
6 Argon, compressed	2.2	UN 1006		3 lb.	Non-Flammable Gas, Limited Quantity	Swantek, Co. Semperik, OH 40222	12345678910111	
<small>THIS IS TO CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION. HAZARDOUS MATERIALS CAN ONLY BE SHIPPED WITHIN THE 48 CONTIGUOUS STATES VIA GROUND SERVICE. HAZARDOUS MATERIALS AND ORM-Ds ARE PROHIBITED FROM ALL AIR SHIPMENTS.</small>								
						SIGNATURE <u>Scott Kerr</u> 1623951		

**SAMPLE HAZARDOUS MATERIAL SHIPPING PAPERS (OP-900):**

**OP-900 Example #1: Exception 49 CFR 173.13**

Shipping papers prepared under 49 CFR 173.13. Packages prepared under this exception do not require DOT hazard labels. The statement “This package conforms to 49 CFR 173.13” must also be marked on the outer package.

130023 CEE0652-446 06/06 <b>OP-900</b> HM Instructions To Shipper: Complete all boxes. Press firmly with ball point pen. All copies must be readable. Remove backing and attach to package near shipping label. To Loader: Tear off copy & place in hazardous materials envelope. To Driver: Carry hazardous materials envelope (with these slices) in vehicle cab during transit. OP-400 6/06	<b>HAZARDOUS MATERIALS</b>			PRINTED IN THE USA	
	FedEx GROUND SHIPPER NUMBER <b>1234567</b>		EMERGENCY CONTACT NUMBER <b>412-123-4567</b>		
	DOT Shipping Name of Material (Additional Entries If Applicable)				
	<b>Chloroform</b>				
	Hazard Class or Division Number <b>6.1</b>		Identification Number <b>UN1888</b>		Packing Group <b>III</b>
	Weight <b>32 oz.</b>	Type DOT Label(s), Ltd. Qty., Exemption Number or Required Information <b>This package conforms to 49CFR 173.13</b>			
SHIPPER: Use ball point pen and press firmly when preparing this form.					

**OP-900 Example #2: Limited Quantity**

Shipping papers prepared under the limited quantity provisions of 49 CFR 173.154, do not require a diamond label. However, the shipper may choose to indicate the name of the label on the proper documentation as well as affixing the hazard label on the outer package.

130023 CEE0652-446 06/06 <b>OP-900</b> HM Instructions To Shipper: Complete all boxes. Press firmly with ball point pen. All copies must be readable. Remove backing and attach to package near shipping label. To Loader: Tear off copy & place in hazardous materials envelope. To Driver: Carry hazardous materials envelope (with these slices) in vehicle cab during transit. OP-400 6/06	<b>HAZARDOUS MATERIALS</b>			PRINTED IN THE USA	
	FedEx GROUND SHIPPER NUMBER <b>1234567</b>		EMERGENCY CONTACT NUMBER <b>412-123-4567</b>		
	DOT Shipping Name of Material (Additional Entries If Applicable)				
	<b>Chlorine Solution</b>				
	Hazard Class or Division Number <b>8</b>		Identification Number <b>UN1908</b>		Packing Group <b>II</b>
	Weight <b>16 oz.</b>	Type DOT Label(s), Ltd. Qty., Exemption Number or Required Information <b>Corrosive, Limited Quantity</b>			
SHIPPER: Use ball point pen and press firmly when preparing this form.					

**OP-900 Example #3: LTD. QTY.**

Shipping papers prepared under the limited quantity provisions of 49 CFR 173.150. The DOT diamond labels are not necessary when prepared as a limited quantity. Shippers can abbreviate the words limited quantity as LTD. QTY.

1300/23 CE0062-MB 08/06 <b>OP-900</b> HM Instructions <b>To Shipper:</b> Complete all boxes. Press firmly with ball point pen. All copies must be readable. Remove backing and attach to package near shipping label. <b>To Loader:</b> Tear off copy & place in hazardous materials envelope. <b>To Driver:</b> Carry hazardous materials envelope (with these clips) in vehicle cab during transit. OP-900 6/06	<b>HAZARDOUS MATERIALS</b>			PRINTED IN THE USA	
	FedEx GROUND SHIPPER NUMBER <b>1234567</b>		EMERGENCY CONTACT NUMBER <b>412-123-4567</b>		
	DOT Shipping Name of Material (Additional Entries If Applicable)				
	<b>Paint</b>				
	Hazard Class or Division Number <b>3</b>		Identification Number <b>UN1263</b>		Packing Group <b>II</b>
	Weight <b>10 lb.</b>	Type DOT Label(s), Ltd. Qty., Exemption Number or Required Information <b>LTD. QTY.</b>			
SHIPPER: Use ball point pen and press firmly when preparing this form.					

**OP-900 Example #4: DOT Special Permit**


FedEx Ground may require certain materials to be shipped using a DOT Special Permit or shippers may be utilizing a DOT Special Permit for other reasons. When shipments are prepared under an applicable DOT Special Permit, the shipping papers and certification form must reflect the appropriate DOT-SP number.

1300/23 CE0062-MB 08/06 <b>OP-900</b> HM Instructions <b>To Shipper:</b> Complete all boxes. Press firmly with ball point pen. All copies must be readable. Remove backing and attach to package near shipping label. <b>To Loader:</b> Tear off copy & place in hazardous materials envelope. <b>To Driver:</b> Carry hazardous materials envelope (with these clips) in vehicle cab during transit. OP-900 6/06	<b>HAZARDOUS MATERIALS</b>			PRINTED IN THE USA	
	FedEx GROUND SHIPPER NUMBER <b>1234567</b>		EMERGENCY CONTACT NUMBER <b>412-123-4567</b>		
	DOT Shipping Name of Material (Additional Entries If Applicable)				
	<b>Toxic, liquids, organic, n.o.s. (thioglycol)</b>				
	Hazard Class or Division Number <b>6.1</b>		Identification Number <b>UN2810</b>		Packing Group <b>III</b>
	Weight <b>16 oz.</b>	Type DOT Label(s), Ltd. Qty., Exemption Number or Required Information <b>DOT-SP-9168</b>			
SHIPPER: Use ball point pen and press firmly when preparing this form.					



## OP-900 Example #5: Radioactive

Radioactive shipments require important information in the Type DOT Label(s) Required, Ltd. Qty., or Special Permit field of the hazardous materials shipping papers. Please refer to the Radioactive section for more information concerning Radioactive shipments.

 <b>HM</b> <b>Instructions</b> <b>To Shipper:</b> Complete all boxes. Press firmly with ball point pen. All copies must be readable. Remove backing and attach to package near shipping label. <b>To Loader:</b> Tear off copy & place in hazardous materials envelope. <b>To Driver:</b> Carry hazardous materials envelope (with these slips) in vehicle cab during transit. OP-900 6/06	<b>HAZARDOUS MATERIALS</b>		PRINTED IN THE USA	
	FedEx GROUND SHIPPER NUMBER <b>1234567</b>			EMERGENCY CONTACT NUMBER <b>412-123-4567</b>
	DOT Shipping Name of Material (Additional Entries If Applicable)			
	<b>Radioactive material, Type A package</b>			
	Hazard Class or Division Number <b>7</b>	Identification Number <b>UN2982</b>		Packing Group <b>II</b>
Weight <b>40 TBq</b>	Type DOT Label(s), Ltd. Qty., Exemption Number or Required Information <b>Radioactive White I, Cs-131, 40TBq, liquid Cesium in solution</b>			
SHIPPER: Use ball point pen and press firmly when preparing this form.				

## OP-900 Example #4: Technical name required

Some DOT Proper Shipping Names require a technical name to be included. Proper shipping names that must include a technical name in parentheses are indicated by the letter "G" in column 1 of the Hazardous Materials Table. Although the letters "n.o.s." often indicates a required technical name, not all shipping names with "n.o.s." require them. Always refer to column 1 for the letter "G" of the Hazardous Materials Table for information.

 <b>HM</b> <b>Instructions</b> <b>To Shipper:</b> Complete all boxes. Press firmly with ball point pen. All copies must be readable. Remove backing and attach to package near shipping label. <b>To Loader:</b> Tear off copy & place in hazardous materials envelope. <b>To Driver:</b> Carry hazardous materials envelope (with these slips) in vehicle cab during transit. OP-900 6/06	<b>HAZARDOUS MATERIALS</b>		PRINTED IN THE USA	
	FedEx GROUND SHIPPER NUMBER <b>1234567</b>			EMERGENCY CONTACT NUMBER <b>412-123-4567</b>
	DOT Shipping Name of Material (Additional Entries If Applicable)			
	<b>Componds, cleaning liquid (contains ethyl alcohol)</b>			
	Hazard Class or Division Number <b>3</b>	Identification Number <b>NA1993</b>		Packing Group <b>I</b>
Weight <b>5 lb.</b>	Type DOT Label(s), Ltd. Qty., Exemption Number or Required Information <b>Flammable Liquid</b>			
SHIPPER: Use ball point pen and press firmly when preparing this form.				

## **Marking**

All packages must be properly marked in accordance with 49 CFR requirements. FedEx Ground requires all packages to have a minimum of four package markings.

1. Shippers Address
2. Consignee (Recipient) Address
3. The DOT Proper Shipping Name
4. The UN/NA Identification Number

Hazardous materials packages may be required to be marked with additional information depending on the contents.

- EX numbers may be required to be marked on the package and/or shipping papers for certain explosives or air bags (Non-Flammable Gas & Class 9). The shipping papers require the EX number to be marked in the 'Type DOT Label(s) required, Ltd. Qty. or Special Permit field' of the OP-900 and OP-950.
- Often, hazardous materials are authorized by the DOT to be transported under a Special Permit. This Special Permit may vary depending on the intent of the shipper. This Special Permit number must be marked on the shipping papers and the outer package. DOT-SP-#### must be legibly marked on the outside package. Packages shipped under a DOT Special Permit number must mark the DOT SP number on the shipping papers in the 'Type DOT Label(s) required, Ltd. Qty. or Special Permit field' of the OP-900 and OP-950. For example, DOT-SP-9168.
- Packages shipped under the exception 49 CFR 173.13 must have marked on the shipping papers and package: "This package conforms to 49 CFR 173.13" in the same field on the OP-900 and OP-950.
- When specification packaging is required, the UN POP marking will be embossed on the outer package. These codes will vary depending on the performance and type of packaging. See the packaging section for further details. The UNPOP (United Nations Performance Oriented Packaging) markings are required to be permanently marked on the outer package. For example: UN 4G/X12/S/99/USA/M123. This mark should never be covered or obstructed by labels or other information.
- Class 2 cylinders must be placed inside an overpack (outer package) marked "OVERPACK." Alternatively, if required by 49 CFR 173.301, the overpack may be marked with a statement indicating that the "Inside (inner) packages comply with prescribed specifications."
- All Lighters or Lighter refills identified as UN1057 must have the appropriate "T" number marked on the package.

Each package containing a material classed as an ORM-D must be marked on at least one side immediately following or below the proper shipping name: *Consumer Commodity, Cartridges, small arms or Cartridges, power device* as appropriate. The ORM-D designation may be handwritten or applied by label. The ORM-D designation must be placed within a rectangle that is approximately 6.3 mm (0.25 inches) larger on each side. It is important to remember that the marking ORM-D is the certification by the person offering the packaging for transportation that the material is properly described, classed, packaged, marked and labeled (when appropriate) and in proper condition for transportation according to the 49 CFR.

All liquid hazardous materials and Class 7 Radioactive must be legibly marked, with package orientation arrows on two opposite vertical sides of the package. They may be hand drawn or affixed by a label and they must conform pictorially to ISO Standard 780-1985: two arrows up with a line underneath and enclosed within a rectangle. Depicting a rectangular border around the arrows is optional.

## **Labeling**

Hazardous Materials packages offered to FedEx Ground must be properly labeled. The hazard diamond label is the most prominent form of communication on a hazardous materials package. The label is diamond in shape and must be displayed on a package of contrasting color. The hazard label is associated with the hazard class and division of the material.

There are some hazardous materials that possess more than one hazard. For these packages the subsidiary hazard label must be displayed within 6 inches of the primary hazard label.

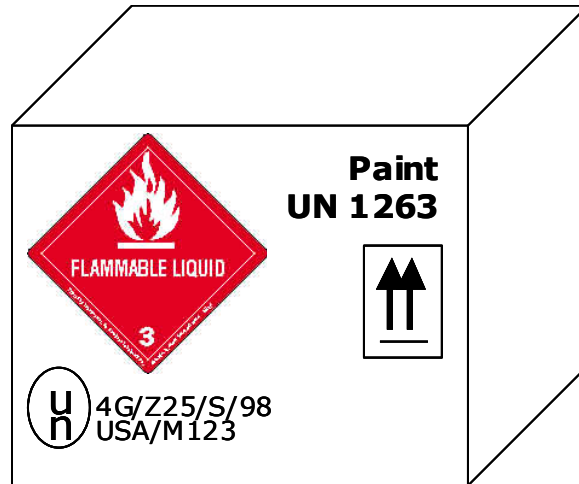
Exceptions to labeling:

- Packages shipped as a Limited Quantity may be exempted from the labeling requirements.
- Packages offered and prepared under a DOT Special Permit may be exempted from labeling.
- Packages prepared under 49 CFR 173.13 do not require a hazard diamond label.

## COMPLETED PACKAGE EXAMPLES:

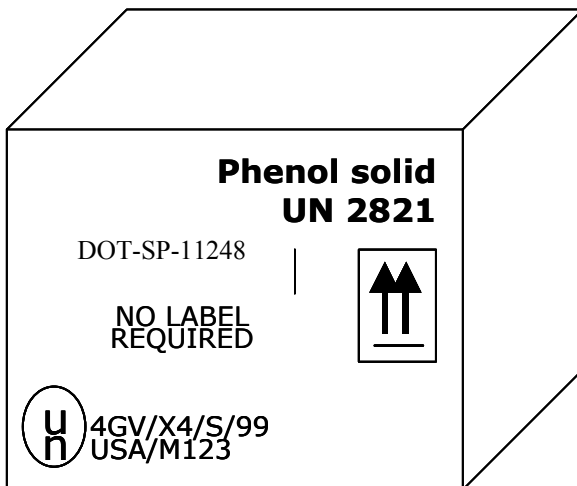
All packages must have the hazardous material shipping paper (OP-900) properly prepared and attached on top of the outer package next to the address label and must include the 'TO' (recipient) and 'FROM' (shipper) addresses. These illustrations are for information purposes only.

### Example #1: Flammable Liquid (Class 3)

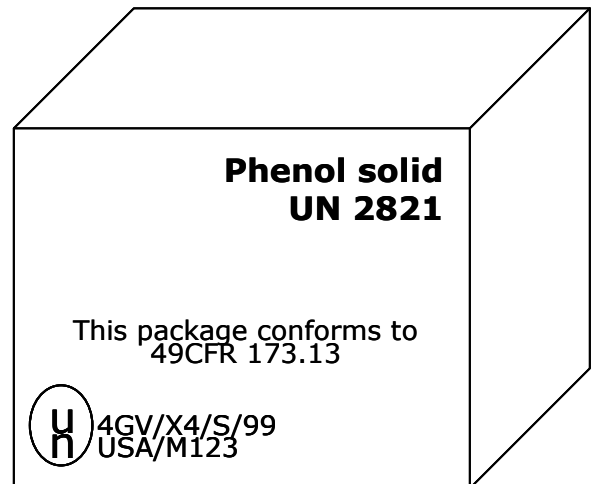


### Example #2: Toxic (Class 6.1)

#### Option 1: DOT Special Permit

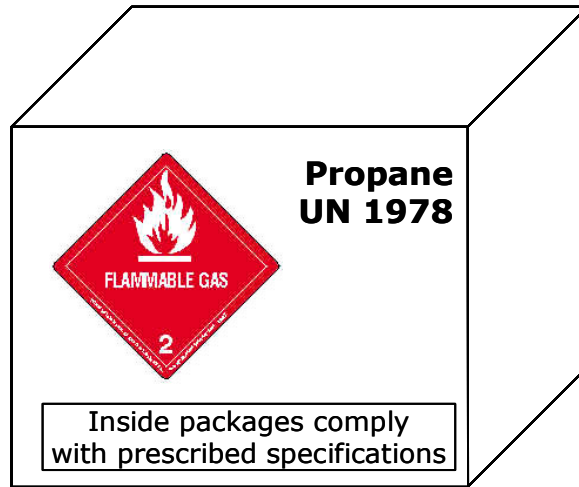


#### Option 2: 49CFR 173.13



**Note:** In either option, the DOT diamond hazard label will not be affixed.

**Example #3: Flammable Gas (Class 2.1)**

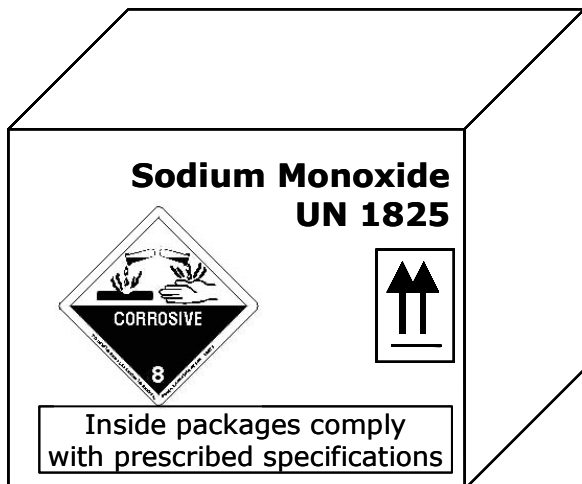


**Note:** All Class 2 (except Lighters-UN1057) materials must be properly overpacked.

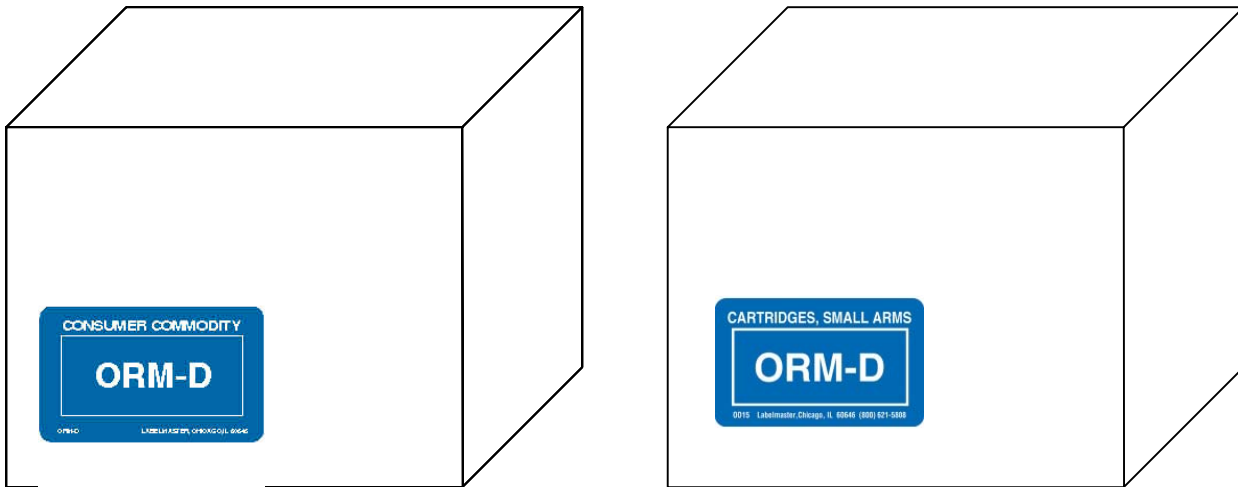
**Example #4: Authorized Single Packaging**

**Option 1: Overpacked (49 CFR 173.25)**

**Option 2: Single (Standalone)**



## Example #5: ORM-D Shipments



**Note:** *ORM-D shipments do NOT require the hazardous material shipping paper (OP-900) and hazardous material certification form (OP-950).*

**Note:** *All outer non-specification packaging (i.e. overpacks, ORM-D's packaging) must display a minimum 200 lb. Burst Strength Test Seal or 32 Edge Crush Test (ECT) Seal.*

## Hazardous Material Support

The Dangerous Goods/Hazardous Materials hotline is available to answer questions about shipping hazardous materials via FedEx Ground. Please call 1-800-GO-FEDEX and press "81."

## Definitions and other terms

For the purpose of this guide, the following commonly used terms have been provided for your information. A complete list of definitions can be found in 49 CFR §171.8.

**Administrator** means the Administrator, Pipeline and Hazardous Materials Safety Administration.

**Aerosol** means any non-refillable receptacle containing a gas compressed, liquefied or dissolved under pressure, the sole purpose of which is to expel a nonpoisonous (other than a Division 6.1 Packing Group III material) liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

**Agricultural product** means a hazardous material, other than a hazardous waste, whose end use directly supports the production of an agricultural commodity including, but not limited to a fertilizer, pesticide, soil amendment or fuel. An agricultural product is limited to a material in Class 3, 8 or 9, Division 2.1, 2.2, 5.1, or 6.1, or an ORM-D material.

**Approval** means a written authorization, including a competent authority approval, from the Associate Administrator or other designated Department official, to perform a function for which prior authorization by the Associate Administrator is required under subchapter C of this chapter (49 CFR parts 171 through 180.)

**Approved** means approval issued or recognized by the Department unless otherwise specifically indicated in this subchapter.

**Asphyxiant gas** means a gas which dilutes or replaces oxygen normally in the atmosphere.

**Associate Administrator** means the Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration.

**Atmospheric gases** means air, nitrogen, oxygen, argon, krypton, neon and xenon.

**Authorized Inspection Agency** means:

- (1) A jurisdiction which has adopted and administers one or more sections of the ASME Boiler and Pressure Vessel Code as a legal requirement and has a representative serving as a member of the ASME Conference Committee; or
- (2) an insurance company which has been licensed or registered by the appropriate authority of a State of the United States or a Province of Canada to underwrite boiler and pressure vessel insurance in such State or Province.

**Authorized Inspector** means an Inspector who is currently commissioned by the National Board of Boiler and Pressure Vessel Inspectors and employed as an Inspector by an Authorized Inspection Agency.

**Bag** means a flexible packaging made of paper, plastic film, textiles, woven material or other similar materials.

**Bar** means 1 BAR = 100 kPa (14.5 psi).

**Barge** means a non-selfpropelled vessel.

**Biological product.** See § 173.134 of this subchapter.

**Bottle** means an inner packaging having a neck of relatively smaller cross section than the body and an opening capable of holding a closure for retention of the contents.

**Bottom shell** means that portion of a tank car tank surface, excluding the head ends of the tank car tank, that lies within two feet, measured circumferentially, of the bottom longitudinal center line of the tank car tank.

**Box** means a packaging with complete rectangular or polygonal faces, made of metal, wood, plywood, reconstituted wood, fiberboard, plastic, or other suitable material. Holes appropriate to the size and use of the packaging, for purposes such as ease of handling or opening, or to meet classification requirements, are permitted as long as they do not compromise the integrity of the packaging during transportation, and are not otherwise prohibited in this subchapter.

**Break-bulk** means packages of hazardous materials that are handled



individually, palletized, or unitized for purposes of transportation as opposed to bulk and containerized freight.

**Btu** means British thermal unit.

**Bulk packaging** means a packaging, other than a vessel or a barge, including a transport vehicle or freight container, in which hazardous materials are loaded with no intermediate form of containment and which has:

- (1) A maximum capacity greater than 450 L (119 gallons) as a receptacle for a liquid;
- (2) A maximum net mass greater than 400 kg (882 pounds) and a maximum capacity greater than 450 L (119 gallons) as a receptacle for a solid; or
- (3) A water capacity greater than 454 kg (1000 pounds) as a receptacle for a gas as defined in § 173.115 of this subchapter.

**Bureau of Explosives** means the Bureau of Explosives (B of E) of the Association of American Railroads.

**C** means Celsius or Centigrade.

**Captain of the Port (COTP)** means the officer of the Coast Guard, under the command of a District Commander, so designated by the Commandant for the purpose of giving immediate direction to Coast Guard law enforcement activities within an assigned area. As used in this subchapter, the term Captain of the Port includes an authorized representative of the Captain of the Port.

**Carfloat** means a vessel that operates on a short run on an irregular basis and serves one or more points in a port area as an extension of a rail line or highway over water, and does not operate in ocean, coastwise, or ferry service.

**Cargo aircraft only** means an aircraft that is used to transport cargo and is not engaged in carrying passengers. For purposes of this subchapter, the terms cargo aircraft only , cargo-only aircraft and cargo aircraft have the same meaning.

**Cargo tank** means a bulk packaging that:

- (1) Is a tank intended primarily for the carriage of liquids or gases and includes appurtenances, reinforcements, fittings, and closures (for the definition of a tank, see 49 CFR 178.320 , 178.337-1, or 178.338-1, as applicable);
- (2) Is permanently attached to or forms a part of a motor vehicle, or is not permanently attached to a motor vehicle but which, by reason of its size,

construction or attachment to a motor vehicle is loaded or unloaded without being removed from the motor vehicle; and

(3) Is not fabricated under a specification for cylinders, intermediate bulk containers, multi-unit tank car tanks, portable tanks, or tank cars.

**Cargo tank motor vehicle** means a motor vehicle with one or more cargo tanks permanently attached to or forming an integral part of the motor vehicle.

**Cargo vessel** means:

(1) Any vessel other than a passenger vessel; and

(2) Any ferry being operated under authority of a change of character certificate issued by a Coast Guard Officer-in-Charge, Marine Inspection.

**Carrier** means a person who transports passengers or property in commerce by rail car, aircraft, motor vehicle, or vessel.

**CC** means closed-cup.

**Character of vessel** means the type of service in which the vessel is engaged at the time of carriage of a hazardous material.

**Class** means hazard class. See hazard class.

Class 1. See § 173.50 of this subchapter.

Class 2. See § 173.115 of this subchapter.

Class 3. See § 173.120 of this subchapter.

Class 4. See § 173.124 of this subchapter.

Class 5. See § 173.128 of this subchapter.

Class 6. See § 173.132 of this subchapter.

Class 7. See § 173.403 of this subchapter.

Class 8. See § 173.136 of this subchapter.

Class 9. See § 173.140 of this subchapter.

**Closure** means a device which closes an opening in a receptacle.

**COFC** means container-on-flat-car.

**Combination packaging** means a combination of packaging, for transport purposes, consisting of one or more inner packagings secured in a non-bulk outer packaging. It does not include a composite packaging.

**Combustible liquid.** See § 173.120 of this subchapter.

**Commerce** means trade or transportation in the jurisdiction of the United States within a single state; between a place in a state and a place outside of the state; or that affects trade or transportation between a place in a state and place outside of the state.

**Compatibility group letter** means a designated alphabetical letter used to categorize different types of explosive substances and articles for purposes of stowage and segregation. See § 173.52 of this subchapter.

**Competent Authority** means a national agency responsible under its national law for the control or regulation of a particular aspect of the transportation of hazardous materials (dangerous goods). The term Appropriate Authority, as used in the ICAO Technical Instructions (IBR, see § 171.7 ), has the same meaning as Competent Authority. For purposes of this subchapter, the Associate Administrator is the Competent Authority for the United States.

**Composite packaging** means a packaging consisting of an outer packaging and an inner receptacle, so constructed that the inner receptacle and the outer packaging form an integral packaging. Once assembled it remains thereafter an integrated single unit; it is filled, stored, shipped and emptied as such.

**Compressed gas.** See § 173.115 of this subchapter.

**Consignee** means the person or place shown on a shipping document, package marking, or other media as the location to which a carrier is directed to transport a hazardous material.

**Consumer commodity** means a material that is packaged and distributed in a form intended or suitable for sale through retail sales agencies or instrumentalities for consumption by individuals for purposes of personal care or household use. This term also includes drugs and medicines.

**Containership** means a cargo vessel designed and constructed to transport, within specifically designed cells, portable tanks and freight containers which are lifted on and off with their contents intact.

**Corrosive material.** See § 173.136 of this subchapter.

**Crate** means an outer packaging with incomplete surfaces.

**Crewmember** means a person assigned to perform duty in an aircraft during flight time.

**Cryogenic liquid.** See § 173.115(g) of this subchapter.

**Cultures and stocks.** See § 173.134 of this subchapter.

**Cylinder** means a pressure vessel designed for pressures higher than 40 psia and having a circular cross section. It does not include a portable tank, multi-unit tank car tank, cargo tank, or tank car.

**Dangerous when wet material.** See § 173.124 of this subchapter.

**Design Certifying Engineer** means a person registered with the Department in accordance with subpart F of part 107 of this chapter who has the knowledge and ability to perform stress analysis of pressure vessels and otherwise determine whether a cargo tank design and construction meets the applicable DOT specification. A Design Certifying Engineer meets the knowledge and ability requirements of this section by meeting any one of the following requirements:  
(1) Has an engineering degree and one year of work experience in cargo tank structural or mechanical design;

- (2) Is currently registered as a professional engineer by appropriate authority of a state of the United States or a province of Canada; or
- (3) Has at least three years' experience in performing the duties of a Design Certifying Engineer prior to September 1, 1991.

**Designated facility** means a hazardous waste treatment, storage, or disposal facility that has been designated on the manifest by the generator.

**Diagnostic specimen.** See § 173.134 of this subchapter.

**District Commander** means the District Commander of the Coast Guard, or his authorized representative, who has jurisdiction in the particular geographical area.

**Division** means a subdivision of a hazard class.

**DOD** means the U.S. Department of Defense.

**Domestic transportation** means transportation between places within the United States other than through a foreign country.

**DOT or Department** means U.S. Department of Transportation.

**Drum** means a flat-ended or convex-ended cylindrical packaging made of metal, fiberboard, plastic, plywood, or other suitable materials. This definition also includes packagings of other shapes made of metal or plastic (e.g., round taper-necked packagings or pail-shaped packagings) but does not include cylinders, jerricans, wooden barrels or bulk packagings.

**Elevated temperature material** means a material which, when offered for transportation or transported in a bulk packaging:

- (1) Is in a liquid phase and at a temperature at or above 100 °C (212 °F);
- (2) Is in a liquid phase with a flash point at or above 37.8 °C (100 °F) that is intentionally heated and offered for transportation or transported at or above its flash point; or
- (3) Is in a solid phase and at a temperature at or above 240 °C (464 °F).

**Engine** means a locomotive propelled by any form of energy and used by a railroad.

**EPA** means U.S. Environmental Protection Agency.

**Etiologic agent.** See § 173.134 of this subchapter.

**EX number** means a number preceded by the prefix "EX", assigned by the Associate Administrator, to an item that has been evaluated under the provisions of § 173.56 of this subchapter.

**Exemption** means a document issued by the Associate Administrator under the authority of 49 U.S.C. 5117. The document permits a person to perform a function that is not otherwise permitted under subchapter A or C of this chapter, or other regulations issued under 49 U.S.C. 5101 through 5127 (e.g., Federal Motor Carrier Safety routing).

**Explosive.** See § 173.50 of this subchapter.

**F** means degree Fahrenheit.

**Farmer** means a person engaged in the production or raising of crops, poultry, or livestock.

**Federal hazardous material transportation law** means 49 U.S.C. 5101 et seq.

**Ferry vessel** means a vessel which is limited in its use to the carriage of deck passengers or vehicles or both, operates on a short run on a frequent schedule between two points over the most direct water route, other than in ocean or coastwise service, and is offered as a public service of a type normally attributed to a bridge or tunnel.

**Filling density** has the following meanings:

- (1) For compressed gases in cylinders, see § 173.304a(a)(2) Table Note 1.
- (2) For compressed gases in tank cars, see § 173.314(c) Table Note 1.
- (3) For compressed gases in cargo tanks and portable tanks, see § 173.315(a) Table Note 1.
- (4) For cryogenic liquids in cylinders, except hydrogen, see § 173.316(c)(1) .
- (5) For hydrogen, cryogenic liquid in cylinders, see § 173.316(c)(3) Table Note 1.
- (6) For cryogenic liquids in cargo tanks, see § 173.318(f)(1) .
- (7) For cryogenic liquids in tank cars, see § 173.319(d)(1) .

**Flammable gas.** See § 173.115 of this subchapter.

**Flammable liquid.** See § 173.120 of this subchapter.

**Flammable solid.** See § 173.124 of this subchapter.

**Flash point.** See § 173.120 of this subchapter.

**Freight container** means a reusable container having a volume of 64 cubic feet or more, designed and constructed to permit being lifted with its contents intact and intended primarily for containment of packages (in unit form) during transportation.

**Fuel tank** means a tank other than a cargo tank, used to transport flammable or combustible liquid, or compressed gas for the purpose of supplying fuel for propulsion of the transport vehicle to which it is attached, or for the operation of other equipment on the transport vehicle.

**Fumigated lading.** See §§ 172.302(g) and 173.9 .

**Gas** means a material which has a vapor pressure greater than 300 kPa (43.5 psia) at 50 °C (122 °F) or is completely gaseous at 20 °C (68 °F) at a standard pressure of 101.3 kPa (14.7 psia).

**Gross weight or Gross mass** means the weight of a packaging plus the weight of its contents.

**Hazard class** means the category of hazard assigned to a hazardous material under the definitional criteria of part 173 of this subchapter and the provisions of the § 172.101 Table. A material may meet the defining criteria for more than one hazard class but is assigned to only one hazard class.

**Hazard zone** means one of four levels of hazard (Hazard Zones A through D) assigned to gases, as specified in § 173.116(a) of this subchapter, and one of two levels of hazards (Hazard Zones A and B) assigned to liquids that are poisonous by inhalation, as specified in § 173.133(a) of this subchapter. A hazard zone is based on the LC50 value for acute inhalation toxicity of gases and vapors, as specified in § 173.133(a) .

**Hazardous material** means a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under section 5103 of Federal hazardous materials transportation law (49 U.S.C. 5103). The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (see 49 CFR 172.101 ), and materials that meet the defining criteria for hazard classes and divisions in part 173 of subchapter C of this chapter.

**Hazardous substance** for the purposes of this subchapter, means a material, including its mixtures and solutions, that-

- (1) Is listed in the Appendix A to § 172.101 of this subchapter;
- (2) Is in a quantity, in one package, which equals or exceeds the reportable quantity (RQ) listed in the Appendix A to § 172.101 of this subchapter; and
- (3) When in a mixture or solution-
  - (i) For radionuclides, conforms to paragraph 7 of the Appendix A to § 172.101 .
  - (ii) For other than radionuclides, is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in the following table:

RQ pounds (kilograms)	Concentration by weight	
	Percent	PPM
5000 (2270)	10	100,000
1000 (454)	2	20,000
100 (45.4)	0.2	2,000
10 (4.54)	0.02	200
1 (0.454)	0.002	20

The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance in Appendix A to § 172.101 of this subchapter, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

**Hazardous waste**, for the purposes of this chapter, means any material that is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR part 262.

**Hazmat** means a hazardous material.

**Hazmat employee** means a person who is employed by a hazmat employer and who in the course of employment directly affects hazardous materials



transportation safety. This term includes an owner-operator of a motor vehicle which transports hazardous materials in commerce. This term includes an individual, including a self-employed individual, employed by a hazmat employer who, during the course of employment:

- (1) Loads, unloads, or handles hazardous materials;
- (2) Manufactures, tests, reconditions, repairs, modifies, marks, or otherwise represents containers, drums, or packagings as qualified for use in the transportation of hazardous materials;
- (3) Prepares hazardous materials for transportation;
- (4) Is responsible for safety of transporting hazardous materials; or
- (5) Operates a vehicle used to transport hazardous materials.

**Hazmat employer** means a person who uses one or more of its employees in connection with: transporting hazardous materials in commerce; causing hazardous materials to be transported or shipped in commerce; or representing, marking, certifying, selling, offering, manufacturing, reconditioning, testing, repairing, or modifying containers, drums, or packagings as qualified for use in the transportation of hazardous materials. This term includes an owner-operator of a motor vehicle which transports hazardous materials in commerce. This term also includes any department, agency, or instrumentality of the United States, a State, a political subdivision of a State, or an Indian tribe engaged in an activity described in the first sentence of this definition.

**Hermetically sealed** means closed by fusion, gasketing, crimping, or equivalent means so that no gas or vapor can enter or escape.

**HMR** means the Hazardous Materials Regulations, Parts 171 through 180 of this chapter.

**IAEA** means International Atomic Energy Agency.

**IATA** means International Air Transport Association.

**ICAO** means International Civil Aviation Organization.

**IMO** means International Maritime Organization.

**Incorporated by reference or IBR** means a publication or a portion of a publication that is made a part of the regulations of this subchapter. See § 171.7 .

***Infectious substance (etiologic agent).*** See § 173.134 of this subchapter.

***Inner packaging*** means a packaging for which an outer packaging is required for transport. It does not include the inner receptacle of a composite packaging.

***Inner receptacle*** means a receptacle which requires an outer packaging in order to perform its containment function. The inner receptacle may be an inner packaging of a combination packaging or the inner receptacle of a composite packaging.

***Intermediate bulk container or IBC*** means a rigid or flexible portable packaging, other than a cylinder or portable tank, which is designed for mechanical handling. Standards for IBCs manufactured in the United States are set forth in subparts N and O of part 178 of this subchapter.

***Intermediate packaging*** means a packaging which encloses an inner packaging or article and is itself enclosed in an outer packaging.

***Intermodal container*** means a freight container designed and constructed to permit it to be used interchangeably in two or more modes of transport.

***Intermodal portable tank or IM portable tank*** means a specific class of portable tanks designed primarily for international intermodal use.

***International transportation*** means transportation-

- (1) Between any place in the United States and any place in a foreign country;
- (2) Between places in the United States through a foreign country; or
- (3) Between places in one or more foreign countries through the United States.

***Irritating material*** . See § 173.132(a)(2) of this subchapter.

***Jerrican*** means a metal or plastic packaging of rectangular or polygonal cross-section.

***Large packaging*** means a packaging that -

- (1) Consists of an outer packaging which contains articles or inner packagings;

- (2) Is designated for mechanical handling;
  - (3) Exceeds 400 kg net mass or 450 liters (118.9 gallons) capacity;
  - (4) Has a volume of not more than 3 m<sup>3</sup> (see § 178.801(i) of this subchapter);
- and
- (5) Conforms to the requirements for the construction, testing and marking of large packagings as specified in the UN Recommendations, Chapter 6.6 (incorporated by reference; see § 171.7 ).

**Limited quantity**, when specified as such in a section applicable to a particular material, means the maximum amount of a hazardous material for which there is a specific labeling or packaging exception.

**Liquid** means a material, other than an elevated temperature material, with a melting point or initial melting point of 20 °C (68 °F) or lower at a standard pressure of 101.3 kPa (14.7 psia). A viscous material for which a specific melting point cannot be determined must be subjected to the procedures specified in ASTM D 4359 "Standard Test Method for Determining Whether a Material is Liquid or Solid" (IBR, See § 171.7 ).

**Liquid phase** means a material that meets the definition of liquid when evaluated at the higher of the temperature at which it is offered for transportation or at which it is transported, not at the 37.8 °C (100 °F) temperature specified in ASTM D 4359 (IBR, see § 171.7 ).

**Loading incidental to movement** means loading by carrier personnel or in the presence of carrier personnel of packaged or containerized hazardous material onto a transport vehicle, aircraft, or vessel for the purpose of transporting it, including the loading, blocking and bracing a hazardous materials package in a freight container or transport vehicle, and segregating a hazardous materials package in a freight container or transport vehicle from incompatible cargo. For a bulk packaging, loading incidental to movement means filling the packaging with a hazardous material for the purpose of transporting it. Loading incidental to movement includes transloading.

**Magazine vessel** means a vessel used for the receiving, storing, or dispensing of explosives.

**Magnetic material.** See § 173.21(d) of this subchapter.

**Marine pollutant**, means a material which is listed in appendix B to § 172.101 of this subchapter (also see § 171.4 ) and, when in a solution or mixture of one or

more marine pollutants, is packaged in a concentration which equals or exceeds:  
(1) Ten percent by weight of the solution or mixture for materials listed in the appendix; or  
(2) One percent by weight of the solution or mixture for materials that are identified as severe marine pollutants in the appendix.

**Marking** means a descriptive name, identification number, instructions, cautions, weight, specification, or UN marks, or combinations thereof, required by this subchapter on outer packagings of hazardous materials.

**Material of trade** means a hazardous material, other than a hazardous waste, that is carried on a motor vehicle -  
(1) For the purpose of protecting the health and safety of the motor vehicle operator or passengers;  
(2) For the purpose of supporting the operation or maintenance of a motor vehicle (including its auxiliary equipment); or  
(3) By a private motor carrier (including vehicles operated by a rail carrier) in direct support of a principal business that is other than transportation by motor vehicle.

**Material poisonous by inhalation** means:

- (1) A gas meeting the defining criteria in § 173.115(c) of this subchapter and assigned to Hazard Zone A, B, C, or D in accordance with § 173.116(a) of this subchapter;
- (2) A liquid (other than as a mist) meeting the defining criteria in § 173.132(a)(1)(iii) of this subchapter and assigned to Hazard Zone A or B in accordance with § 173.133(a) of this subchapter; or
- (3) Any material identified as an inhalation hazard by a special provision in Column 7 of the § 172.101 Table.

**Maximum allowable working pressure** or **MAWP**: For DOT specification cargo tanks used to transport liquid hazardous materials, see § 178.320(a) of this subchapter.

**Maximum capacity** means the maximum inner volume of receptacles or packagings.

**Maximum net mass** means the allowable maximum net mass of contents in a single packaging, or as used in subpart M of part 178 of this subchapter, the maximum combined mass of inner packaging, and the contents thereof.

**Metered delivery service** means a cargo tank unloading operation conducted at a metered flow rate of 378.5 L (100 gallons) per minute or less through an attached delivery hose with a nominal inside diameter of 3.175 cm (1 ¼ inches) or less.

**Miscellaneous hazardous material.** See § 173.140 of this subchapter.

**Mixture** means a material composed of more than one chemical compound or element.

**Mode** means any of the following transportation methods; rail, highway, air, or water.

**Motor vehicle** includes a vehicle, machine, tractor, trailer, or semitrailer, or any combination thereof, propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property. It does not include a vehicle, locomotive, or car operated exclusively on a rail or rails, or a trolley bus operated by electric power derived from a fixed overhead wire, furnishing local passenger transportation similar to street-railway service.

**Movement** means the physical transfer of a hazardous material from one geographic location to another by rail car, aircraft, motor vehicle, or vessel.

**Name of contents** means the proper shipping name as specified in § 172.101 of this subchapter.

**Navigable waters** means, for the purposes of this subchapter, waters of the United States, including the territorial seas.

**Non-bulk packaging** means a packaging which has:

- (1) A maximum capacity of 450 L (119 gallons) or less as a receptacle for a liquid;
- (2) A maximum net mass of 400 kg (882 pounds) or less and a maximum capacity of 450 L (119 gallons) or less as a receptacle for a solid; or
- (3) A water capacity of 454 kg (1000 pounds) or less as a receptacle for a gas as defined in § 173.115 of this subchapter.

**Nonflammable gas.** See § 173.115 of this subchapter.

**N.O.S.** means not otherwise specified.

**N.O.S. description** means a shipping description from the § 172.101 table which includes the abbreviation n.o.s.

**NPT** means an American Standard taper pipe thread conforming to the requirements of NBS Handbook H-28 (IBR, see § 171.7

**NRC (non-reusable container)** means a packaging (container) whose reuse is restricted in accordance with the provisions of § 173.28 of this subchapter.

**Occupied caboose** means a rail car being used to transport non-passenger personnel.

**Officer in Charge, Marine Inspection** means a person from the civilian or military branch of the Coast Guard designated as such by the Commandant and who under the supervision and direction of the Coast Guard District Commander is in charge of a designated inspection zone for the performance of duties with respect to the enforcement and administration of title 52, Revised Statutes, acts amendatory thereof or supplemental thereto, rules and regulations thereunder, and the inspection required thereby.

**Offshore supply vessel** means a cargo vessel of less than 500 gross tons that regularly transports goods, supplies or equipment in support of exploration or production of offshore mineral or energy resources.

**Operator** means a person who controls the use of an aircraft, vessel, or vehicle.

**Organic peroxide.** See § 173.128 of this subchapter.

**ORM** means other regulated material. See § 173.144 of this subchapter.

**Outage or ullage** means the amount by which a packaging falls short of being liquid full, usually expressed in percent by volume.

**Outer packaging** means the outermost enclosure of a composite or combination packaging together with any absorbent materials, cushioning and any other

components necessary to contain and protect inner receptacles or inner packagings.

**Overpack**, except as provided in subpart K of part 178 of this subchapter, means an enclosure that is used by a single consignor to provide protection or convenience in handling of a package or to consolidate two or more packages. Overpack does not include a transport vehicle, freight container, or aircraft unit load device. Examples of overpacks are one or more packages:

- (1) Placed or stacked onto a load board such as a pallet and secured by strapping, shrink wrapping, stretch wrapping, or other suitable means; or
- (2) Placed in a protective outer packaging such as a box or crate.

**Oxidizer.** See § 173.127 of this subchapter.

**Oxidizing gas** means a gas which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does.

**Oxygen generator (chemical)** means a device containing chemicals that upon activation release oxygen as a product of chemical reaction.

**Package** or **Outside Package** means a packaging plus its contents. For radioactive materials, see § 173.403 of this subchapter.

**Packaging** means a receptacle and any other components or materials necessary for the receptacle to perform its containment function in conformance with the minimum packing requirements of this subchapter. For radioactive materials packaging, see § 173.403 of this subchapter.

**Packing group** means a grouping according to the degree of danger presented by hazardous materials. Packing Group I indicates great danger; Packing Group II, medium danger; Packing Group III, minor danger. See § 172.101(f) of this subchapter.

**Passenger (With respect to vessels and for the purposes of part 176 only)**

means a person being carried on a vessel other than:

- (1) The owner or his representative;
  - (2) The operator;
  - (3) A bona fide member of the crew engaged in the business of the vessel who has contributed no consideration for his carriage and who is paid for his services;
- or

(4) A guest who has not contributed any consideration directly or indirectly for his carriage.

**Passenger-carrying aircraft** means an aircraft that carries any person other than a crewmember, company employee, an authorized representative of the United States, or a person accompanying the shipment.

**Passenger vessel** means-

- (1) A vessel subject to any of the requirements of the International Convention for the Safety of Life at Sea, 1974, which carries more than 12 passengers;
- (2) A cargo vessel documented under the laws of the United States and not subject to that Convention, which carries more than 16 passengers;
- (3) A cargo vessel of any foreign nation that extends reciprocal privileges and is not subject to that Convention and which carries more than 16 passengers; and
- (4) A vessel engaged in a ferry operation and which carries passengers.

**Person** means an individual, corporation, company, association, firm, partnership, society, joint stock company; or a government, Indian tribe, or authority of a government or tribe offering a hazardous material for transportation in commerce or transporting a hazardous material to support a commercial enterprise. This term does not include the United States Postal Service or, for purposes of 49 U.S.C. 5123 and 5124, a Department, agency, or instrumentality of the government.

**Person who offers or offeror** means:

- (1) Any person who does either or both of the following:
  - (i) Performs, or is responsible for performing, any pre-transportation function required under this subchapter for transportation of the hazardous material in commerce.
  - (ii) Tenders or makes the hazardous material available to a carrier for transportation in commerce.
- (2) A carrier is not an offeror when it performs a function required by this subchapter as a condition of acceptance of a hazardous material for transportation in commerce ( e.g. , reviewing shipping papers, examining packages to ensure that they are in conformance with this subchapter, or preparing shipping documentation for its own use) or when it transfers a hazardous material to another carrier for continued transportation in commerce without performing a pre-transportation function.

**PHMSA** means the Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington, DC 20590.



**Placarded car** means a rail car which is placarded in accordance with the requirements of part 172 of this subchapter.

**Poisonous gas.** See § 173.115 of this subchapter.

**Poisonous materials.** See § 173.132 of this subchapter.

**Portable tank** means a bulk packaging (except a cylinder having a water capacity of 1000 pounds or less) designed primarily to be loaded onto, or on, or temporarily attached to a transport vehicle or ship and equipped with skids, mountings, or accessories to facilitate handling of the tank by mechanical means. It does not include a cargo tank, tank car, multi-unit tank car tank, or trailer carrying 3AX, 3AAX, or 3T cylinders.

**Preferred route** or **Preferred highway** is a highway for shipment of highway route controlled quantities of radioactive materials so designated by a State routing agency, and any Interstate System highway for which an alternative highway has not been designated by such State agency as provided by § 397.103 of this title.

**Pre-transportation function** means a function specified in the HMR that is required to assure the safe transportation of a hazardous material in commerce, including-

- (1) Determining the hazard class of a hazardous material.
- (2) Selecting a hazardous materials packaging.
- (3) Filling a hazardous materials packaging, including a bulk packaging.
- (4) Securing a closure on a filled or partially filled hazardous materials package or container or on a package or container containing a residue of a hazardous material.
- (5) Marking a package to indicate that it contains a hazardous material.
- (6) Labeling a package to indicate that it contains a hazardous material.
- (7) Preparing a shipping paper.
- (8) Providing and maintaining emergency response information.
- (9) Reviewing a shipping paper to verify compliance with the HMR or international equivalents.
- (10) For each person importing a hazardous material into the United States, providing the shipper with timely and complete information as to the HMR requirements that will apply to the transportation of the material within the United States.
- (11) Certifying that a hazardous material is in proper condition for transportation in conformance with the requirements of the HMR.
- (12) Loading, blocking, and bracing a hazardous materials package in a freight

container or transport vehicle.

(13) Segregating a hazardous materials package in a freight container or transport vehicle from incompatible cargo.

(14) Selecting, providing, or affixing placards for a freight container or transport vehicle to indicate that it contains a hazardous material.

**Primary hazard** means the hazard class of a material as assigned in the § 172.101 table.

**Private track** or **Private siding** means:

(i) Track located outside of a carrier's right-of-way, yard, or terminals where the carrier does not own the rails, ties, roadbed, or right-of-way, or

(ii) Track leased by a railroad to a lessee, where the lease provides for, and actual practice entails, exclusive use of that trackage by the lessee and/or a general system railroad for purpose of moving only cars shipped to or by the lessee, and where the lessor otherwise exercises no control over or responsibility for the trackage or the cars on the trackage.

**Proper shipping name** means the name of the hazardous material shown in Roman print (not italics) in § 172.101 of this subchapter.

**Psi** means pounds per square inch.

**Psia** means pounds per square inch absolute.

**Psig** means pounds per square inch gauge.

**Public vessel** means a vessel owned by and being used in the public service of the United States. It does not include a vessel owned by the United States and engaged in a trade or commercial service or a vessel under contract or charter to the United States.

**Pyrophoric liquid.** See § 173.124(b) of this subchapter.

**Radioactive materials.** See § 173.403 of this subchapter for definitions relating to radioactive materials.

**Rail car** means a car designed to carry freight or non-passenger personnel by

rail, and includes a box car, flat car, gondola car, hopper car, tank car, and occupied caboose.

**Railroad** means a person engaged in transportation by rail.

**Receptacle** means a containment vessel for receiving and holding materials, including any means of closing.

**Registered Inspector** means a person registered with the Department in accordance with subpart F of part 107 of this chapter who has the knowledge and ability to determine whether a cargo tank conforms to the applicable DOT specification. A Registered Inspector meets the knowledge and ability requirements of this section by meeting any one of the following requirements:

- (1) Has an engineering degree and one year of work experience relating to the testing and inspection of cargo tanks;
- (2) Has an associate degree in engineering and two years of work experience relating to the testing and inspection of cargo tanks;
- (3) Has a high school diploma (or General Equivalency Diploma) and three years of work experience relating to the testing and inspection of cargo tanks; or
- (4) Has at least three years' experience performing the duties of a Registered Inspector prior to September 1, 1991.

**Regulated medical waste.** See § 173.134 of this subchapter.

**Reportable quantity (RQ)** for the purposes of this subchapter means the quantity specified in column 2 of the appendix to § 172.101 for any material identified in Column 1 of the appendix.

**Research** means investigation or experimentation aimed at the discovery of new theories or laws and the discovery and interpretation of facts or revision of accepted theories or laws in the light of new facts.

**Residue** means the hazardous material remaining in a packaging, including a tank car, after its contents have been unloaded to the maximum extent practicable and before the packaging is either refilled or cleaned of hazardous material and purged to remove any hazardous vapors.

**Risk group.** See § 173.134 of this subchapter.

**SADT** means self-accelerated decomposition temperature. See § 173.21(f) of this subchapter.

**Salvage packaging** means a special packaging conforming to § 173.3 of this subchapter into which damaged, defective, leaking, or non-conforming hazardous materials packages, or hazardous materials that have spilled or leaked, are placed for purposes of transport for recovery or disposal.

**SCF (standard cubic foot)** means one cubic foot of gas measured at 60 °F. and 14.7 psia.

**Secretary** means the Secretary of Transportation.

**Self-defense spray** means an aerosol or non-pressurized device that:

(1) Is intended to have an irritating or incapacitating effect on a person or animal; and

(2) Meets no hazard criteria other than for Class 9 (for example, a pepper spray; see § 173.140(a) of this subchapter) and, for an aerosol, Division 2.1 or 2.2 (see § 173.115 of this subchapter), except that it may contain not more than two percent by mass of a tear gas substance (e.g., chloroacetophenone (CN) or 0-chlorobenzylmalonitrile (CS); see § 173.132(a)(2) of this subchapter.)

**Sharps.** See § 173.134 of this subchapter.

**Shipping paper** means a shipping order, bill of lading, manifest or other shipping document serving a similar purpose and containing the information required by §§ 172.202 , 172.203 and 172.204 .

**Siftproof packaging** means a packaging impermeable to dry contents, including fine solid material produced during transportation.

**Single packaging** means a non-bulk packaging other than a combination packaging.

**Solid** means a material which is not a gas or a liquid.

**Solution** means any homogeneous liquid mixture of two or more chemical

compounds or elements that will not undergo any segregation under conditions normal to transportation.

**Specification packaging** means a packaging conforming to one of the specifications or standards for packagings in part 178 or part 179 of this subchapter.

**Spontaneously combustible material.** See § 173.124(b) of this subchapter.

**Stabilized** means that the hazardous material is in a condition that precludes uncontrolled reaction. This may be achieved by methods such as adding an inhibiting chemical, degassing the hazardous material to remove dissolved oxygen and inerting the air space in the package, or maintaining the hazardous material under temperature control.

**State** means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, the Virgin Islands, American Samoa, Guam, or any other territory or possession of the United States designated by the Secretary.

**State-designated route** means a preferred route selected in accordance with U.S. DOT "Guidelines for Selecting Preferred Highway Routes for Highway Route Controlled Quantities of Radioactive Materials" or an equivalent routing analysis which adequately considers overall risk to the public.

**Storage incidental to movement** means storage of a transport vehicle, freight container, or package containing a hazardous material by any person between the time that a carrier takes physical possession of the hazardous material for the purpose of transporting it in commerce until the package containing the hazardous material is physically delivered to the destination indicated on a shipping document, package marking, or other medium, or, in the case of a private motor carrier, between the time that a motor vehicle driver takes physical possession of the hazardous material for the purpose of transporting it in commerce until the driver relinquishes possession of the package at its destination and is no longer responsible for performing functions subject to the HMR with respect to that particular package.

(1) Storage incidental to movement includes-

- (i) Storage at the destination shown on a shipping document, including storage at a transloading facility, provided the shipping documentation identifies the shipment as a through-shipment and identifies the final destination or destinations of the hazardous material; and
- (ii) Rail cars containing hazardous materials that are stored on track that does

not meet the definition of "private track or siding" in § 171.8 , even if those cars have been delivered to the destination shown on the shipping document.

(2) Storage incidental to movement does not include storage of a hazardous material at its final destination as shown on a shipping document.

**Stowage** means the act of placing hazardous materials on board a vessel.

**Strong outside container** means the outermost enclosure which provides protection against the unintentional release of its contents under conditions normally incident to transportation.

**Subsidiary hazard** means a hazard of a material other than the primary hazard. (See primary hazard ).

**Table in** § 172.101 or § 172.101 table means the Hazardous Materials Table in § 172.101 of this subchapter.

**Technical name** means a recognized chemical name or microbiological name currently used in scientific and technical handbooks, journals, and texts. Generic descriptions are authorized for use as technical names provided they readily identify the general chemical group, or microbiological group. Examples of acceptable generic chemical descriptions are organic phosphate compounds, petroleum aliphatic hydrocarbons and tertiary amines. For proficiency testing only, generic microbiological descriptions such as bacteria, mycobacteria, fungus, and viral samples may be used. Except for names which appear in subpart B of part 172 of this subchapter, trade names may not be used as technical names.

**TOFC** means trailer-on-flat-car.

**Top shell** means the tank car tank surface, excluding the head ends and bottom shell of the tank car tank.

**Toxin.** See § 173.134 of this subchapter.

**Trailership** means a vessel, other than a carfloat, specifically equipped to carry motor transport vehicles and fitted with installed securing devices to tie down each vehicle. The term trailership includes Roll-on/Roll-off (RO/RO) vessels.

**Train** means one or more engines coupled with one or more rail cars, except during switching operations or where the operation is that of classifying and assembling rail cars within a railroad yard for the purpose of making or breaking up trains.

**Trainship** means a vessel other than a rail car ferry or carfloat, specifically equipped to transport railroad vehicles, and fitted with installed securing devices to tie down each vehicle.

**Transloading** means the transfer of a hazardous material by any person from one bulk packaging to another bulk packaging, from a bulk packaging to a non-bulk packaging, or from a non-bulk packaging to a bulk packaging for the purpose of continuing the movement of the hazardous material in commerce.

**Transportation** or **transport** means the movement of property and loading, unloading, or storage incidental to that movement.

**Transport vehicle** means a cargo-carrying vehicle such as an automobile, van, tractor, truck, semitrailer, tank car or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, rail car, etc.) is a separate transport vehicle.

**UFC** means Uniform Freight Classification.

**UN** means United Nations.

**UN portable tank** means a intermodal tank having a capacity of more than 450 liters (118.9 gallons). It includes a shell fitted with service equipment and structural equipment, including stabilizing members external to the shell and skids, mountings or accessories to facilitate mechanical handling. A UN portable tank must be capable of being filled and discharged without the removal of its structural equipment and must be capable of being lifted when full. Cargo tanks, rail tank car tanks, non-metallic tanks, non-specification tanks, bulk bins, and IBCs and packagings made to cylinder specifications are not UN portable tanks.

**UN Recommendations** means the UN Recommendations on the Transport of Dangerous Goods (IBR, see § 171.7 ).

**UN standard packaging** means a packaging conforming to standards in the UN Recommendations (IBR, see § 171.7 ).

**Undeclared hazardous material** means a hazardous material that is: (1) Subject to any of the hazard communication requirements in subparts C (Shipping Papers), D (Marking), E (Labeling), and F (Placarding) of Part 172 of this subchapter, or an alternative marking requirement in Part 173 of this subchapter (such as § 173.4(a)(10) and 173.6(c) ); and (2) offered for transportation in commerce without any visible indication to the person accepting the hazardous material for transportation that a hazardous material is present, on either an accompanying shipping document, or the outside of a transport vehicle, freight container, or package.

**Unintentional release** means the escape of a hazardous material from a package on an occasion not anticipated or planned. This includes releases resulting from collision, package failures, human error, criminal activity, negligence, improper packing, or unusual conditions such as the operation of pressure relief devices as a result of over-pressurization, overfill or fire exposure. It does not include releases, such as venting of packages, where allowed, and the operational discharge of contents from packages.

**Unit load device** means any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo.

**United States** means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, the Virgin Islands, American Samoa, Guam, or any other territory or possession of the United States designated by the Secretary.

**Unloading incidental to movement** means removing a packaged or containerized hazardous material from a transport vehicle, aircraft, or vessel, or for a bulk packaging, emptying a hazardous material from the bulk packaging after the hazardous material has been delivered to the consignee when performed by carrier personnel or in the presence of carrier personnel or, in the case of a private motor carrier, while the driver of the motor vehicle from which the hazardous material is being unloaded immediately after movement is completed is present during the unloading operation. (Emptying a hazardous material from a bulk packaging while the packaging is on board a vessel is subject to separate regulations as delegated by Department of Homeland Security Delegation No. 0170.1 at 2(103).) Unloading incidental to movement includes transloading.



**Vessel** includes every description of watercraft, used or capable of being used as a means of transportation on the water.

**Viscous liquid** means a liquid material which has a measured viscosity in excess of 2500 centistokes at 25 °C. (77 °F.) when determined in accordance with the procedures specified in ASTM Method D 445-72 "Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)" or ASTM Method D 1200-70 "Viscosity of Paints, Varnishes, and Lacquers by Ford Viscosity Cup."

**Volatility** refers to the relative rate of evaporation of materials to assume the vapor state.

**Water reactive material.** See § 173.124(c) of this subchapter.

**Water resistant** means having a degree of resistance to permeability by and damage caused by water in liquid form.

**Wooden barrel** means a packaging made of natural wood, of round cross-section, having convex walls, consisting of staves and heads and fitted with hoops.

**W.T.** means watertight.

## 49 CFR (Code of Federal Regulations)

The following sections have been taken directly from 49CFR (volume 2 revised as of October 1, 2005) and have been included in this guide as assistance to your questions and preparation of the hazardous material package. A complete print of all sections can be found in the latest hardcopy version or accessing the Internet through address <http://hazmat.dot.gov>.

### **Subpart H—Training**

#### **§ 172.700 Purpose and scope.**

(a) *Purpose.* This subpart prescribes requirements for training hazmat employees.

(b) *Scope.* Training as used in this subpart means a systematic program that ensures a hazmat employee has familiarity with the general provisions of this subchapter, is able to recognize and identify hazardous materials, has knowledge of specific requirements of this subchapter applicable to functions performed by the employee, and has knowledge of emergency response information, self-protection measures and accident prevention methods and procedures (see §172.704).

(c) *Modal-specific training requirements.* Additional training requirements for the individual modes of transportation are prescribed in parts 174, 175, 176, and 177 of this subchapter.

#### **§ 172.701 Federal-State relationship.**

This subpart and the parts referenced in §172.700(c) prescribe minimum training requirements for the transportation of hazardous materials. For motor vehicle drivers, however, a State may impose more stringent training requirements only if those requirements—

(a) Do not conflict with the training requirements in this subpart and in part 177 of this subchapter; and

(b) Apply only to drivers domiciled in that State.

#### **§ 172.702 Applicability and responsibility for training and testing.**

(a) A hazmat employer shall ensure that each of its hazmat employees is trained in accordance with the requirements prescribed in this subpart.

(b) Except as provided in §172.704(c)(1), a hazmat employee who performs any function subject to the requirements of this subchapter may not perform that function unless instructed in the requirements of this subchapter that apply to that function. It is the duty of each hazmat employer to comply with the applicable

requirements of this subchapter and to thoroughly instruct each hazmat employee in relation thereto.

(c) Training may be provided by the hazmat employer or other public or private sources.

(d) A hazmat employer shall ensure that each of its hazmat employees is tested by appropriate means on the training subjects covered in §172.704.

[Amdt. 172–126, 57 FR 20952, May 15, 1992; 57 FR 22182, May 27, 1992, as amended by Amdt. 172–149, 61 FR 27173, May 30, 1996]

#### **§ 172.704 Training requirements.**

(a) Hazmat employee training must include the following:

(1) *General awareness/familiarization training.* Each hazmat employee shall be provided general awareness/familiarization training designed to provide familiarity with the requirements of this subchapter, and to enable the employee to recognize and identify hazardous materials consistent with the hazard communication standards of this subchapter.

(2) *Function-specific training.* (i) Each hazmat employee must be provided function-specific training concerning requirements of this subchapter, or exemptions or special permits issued under subchapter A of this chapter, that are specifically applicable to the functions the employee performs.

(ii) As an alternative to function-specific training on the requirements of this subchapter, training relating to the requirements of the ICAO Technical Instructions and the IMDG Code may be provided to the extent such training addresses functions authorized by §§171.11 and 171.12 of this subchapter.

(3) *Safety training.* Each hazmat employee shall receive safety training concerning—

(i) Emergency response information required by subpart G of part 172;

(ii) Measures to protect the employee from the hazards associated with hazardous materials to which they may be exposed in the work place, including specific measures the hazmat employer has implemented to protect employees from exposure; and

(iii) Methods and procedures for avoiding accidents, such as the proper procedures for handling packages containing hazardous materials.

(4) *Security awareness training.* No later than the date of the first scheduled recurrent training after March 25, 2003, and in no case later than March 24, 2006, each hazmat employee must receive training that provides an awareness of security risks associated with hazardous materials transportation and methods designed to enhance transportation security. This training must also include a

component covering how to recognize and respond to possible security threats. After March 25, 2003, new hazmat employees must receive the security awareness training required by this paragraph within 90 days after employment.

(5) *In-depth security training.* By December 22, 2003, each hazmat employee of a person required to have a security plan in accordance with subpart I of this part must be trained concerning the security plan and its implementation. Security training must include company security objectives, specific security procedures, employee responsibilities, actions to take in the event of a security breach, and the organizational security structure.

(b) *OSHA, EPA, and other training.* Training conducted by employers to comply with the hazard communication programs required by the Occupational Safety and Health Administration of the Department of Labor (29 CFR 1910.120 or 1910.1200) or the Environmental Protection Agency (40 CFR 311.1), or training conducted by employers to comply with security training programs required by other Federal or international agencies, may be used to satisfy the training requirements in paragraph (a) of this section to the extent that such training addresses the training components specified in paragraph (a) of this section.

(c) *Initial and recurrent training—(1) Initial training.* A new hazmat employee, or a hazmat employee who changes job functions may perform those functions prior to the completion of training provided—

(i) The employee performs those functions under the direct supervision of a properly trained and knowledgeable hazmat employee; and

(ii) The training is completed within 90 days after employment or a change in job function.

(2) *Recurrent training.* A hazmat employee shall receive the training required by this subpart at least once every three years.

(3) *Relevant Training.* Relevant training received from a previous employer or other source may be used to satisfy the requirements of this subpart provided a current record of training is obtained from hazmat employees' previous employer.

(4) *Compliance.* Each hazmat employer is responsible for compliance with the requirements of this subchapter regardless of whether the training required by this subpart has been completed.

(d) *Recordkeeping.* A record of current training, inclusive of the preceding three years, in accordance with this section shall be created and retained by each hazmat employer for as long as that employee is employed by that employer as a hazmat employee and for 90 days thereafter. The record shall include:

(1) The hazmat employee's name;

(2) The most recent training completion date of the hazmat employee's training;

(3) A description, copy, or the location of the training materials used to meet the requirements in paragraph (a) of this section;

(4) The name and address of the person providing the training; and

(5) Certification that the hazmat employee has been trained and tested, as required by this subpart.

(e) *Limitations.* The following limitations apply:

(1) A hazmat employee who repairs, modifies, reconditions, or tests packagings, as qualified for use in the transportation of hazardous materials, and who does not perform any other function subject to the requirements of this subchapter, is not subject to the training requirement of paragraph (a)(3) of this section.

(2) A railroad maintenance-of-way employee or railroad signalman, who does not perform any function subject to the requirements of this subchapter, is not subject to the training requirements of paragraphs (a)(2), (a)(4), or (a)(5) of this section. Initial training for a railroad maintenance-of-way employee or railroad signalman in accordance with this section must be completed by October 1, 2006.

## **Subpart I—Security Plans**

### **§ 172.800 Purpose and applicability**

(a) *Purpose.* This subpart prescribes requirements for development and implementation of plans to address security risks related to the transportation of hazardous materials in commerce.

(b) *Applicability.* By September 25, 2003, each person who offers for transportation in commerce or transports in commerce one or more of the following hazardous materials must develop and adhere to a security plan for hazardous materials that conforms to the requirements of this subpart:

(1) A highway route-controlled quantity of a Class 7 (radioactive) material, as defined in §173.403 of this subchapter, in a motor vehicle, rail car, or freight container;

(2) More than 25 kg (55 pounds) of a Division 1.1, 1.2, or 1.3 (explosive) material in a motor vehicle, rail car, or freight container;

(3) More than one L (1.06 qt) per package of a material poisonous by inhalation, as defined in §171.8 of this subchapter, that meets the criteria for Hazard Zone A, as specified in §§173.116(a) or 173.133(a) of this subchapter;

(4) A shipment of a quantity of hazardous materials in a bulk packaging having a capacity equal to or greater than 13,248 L (3,500 gallons) for liquids or gases or more than 13.24 cubic meters (468 cubic feet) for solids;

(5) A shipment in other than a bulk packaging of 2,268 kg (5,000 pounds) gross weight or more of one class of hazardous materials for which placarding of a vehicle, rail car, or freight container is required for that class under the provisions of subpart F of this part;

(6) A select agent or toxin regulated by the Centers for Disease Control and Prevention under 42 CFR part 73; or

(7) A quantity of hazardous material that requires placarding under the provisions of subpart F of this part.

(c) *Exceptions.* Transportation activities of a farmer, who generates less than \$500,000 annually in gross receipts from the sale of agricultural commodities or products, are not subject to this subpart if such activities are:

(1) Conducted by highway or rail;

(2) In direct support of their farming operations; and

(3) Conducted within a 150-mile radius of those operations.

[68 FR 14521, Mar. 25, 2003, as amended at 70 FR 73164, Dec. 9, 2005]

#### **§ 172.802 Components of a security plan**

(a) The security plan must include an assessment of possible transportation security risks for shipments of the hazardous materials listed in §172.800 and appropriate measures to address the assessed risks. Specific measures put into place by the plan may vary commensurate with the level of threat at a particular time. At a minimum, a security plan must include the following elements:

(1) *Personnel security.* Measures to confirm information provided by job applicants hired for positions that involve access to and handling of the hazardous materials covered by the security plan. Such confirmation system must be consistent with applicable Federal and State laws and requirements concerning employment practices and individual privacy.

(2) *Unauthorized access.* Measures to address the assessed risk that unauthorized persons may gain access to the hazardous materials covered by the security plan or transport conveyances being prepared for transportation of the hazardous materials covered by the security plan.

(3) *En route security.* Measures to address the assessed security risks of shipments of hazardous materials covered by the security plan en route from origin to destination, including shipments stored incidental to movement.

(b) The security plan must be in writing and must be retained for as long as it remains in effect. Copies of the security plan, or portions thereof, must be available to the employees who are responsible for implementing it, consistent with personnel security clearance or background investigation restrictions and a

demonstrated need to know. The security plan must be revised and updated as necessary to reflect changing circumstances. When the security plan is updated or revised, all copies of the plan must be maintained as of the date of the most recent revision.

#### **§ 172.804 Relationship to other Federal requirements**

To avoid unnecessary duplication of security requirements, security plans that conform to regulations, standards, protocols, or guidelines issued by other Federal agencies, international organizations, or industry organizations may be used to satisfy the requirements in this subpart, provided such security plans address the requirements specified in this subpart

#### **§ 173.3 Packaging and exceptions**

(a) The packaging of hazardous materials for transportation by air, highway, rail, or water must be as specified in this part. Methods of manufacture, packing, and storage of hazardous materials, that affect safety in transportation, must be open to inspection by a duly authorized representative of the initial carrier or of the Department. Methods of manufacture and related functions necessary for completion of a DOT specification or U.N. standard packaging must be open to inspection by a representative of the Department.

(b) The regulations setting forth packaging requirements for a specific material apply to all modes of transportation unless otherwise stated, or unless exceptions from packaging requirements are authorized.

(c) *Salvage drums.* Packages of hazardous materials that are damaged, defective, or leaking; packages found to be not conforming to the requirements of this subchapter after having been placed in transportation; and, hazardous materials that have spilled or leaked may be placed in a metal or plastic removable head salvage drum that is compatible with the lading and shipped for repackaging or disposal under the following conditions:

(1) Except as provided in paragraph (c)(7) of this section, the drum must be a UN 1A2, 1B2, 1N2 or 1H2 tested and marked for Packing Group III or higher performance standards for liquids or solids and a leakproofness test of 20 kPa (3 psig). Alternatively, a drum manufactured and marked prior to October 1, 1993 as a salvage drum, in accordance with the provisions of this section in effect on September 30, 1991, is authorized. Capacity of the drum may not exceed 450 L (119 gallons).

(2) Each drum shall be provided when necessary with sufficient cushioning and absorption material to prevent excessive shifting of the damaged package and to eliminate the presence of any free liquid at the time the salvage drum is closed. All cushioning and absorbent material used in the drum must be compatible with the hazardous material.

(3) Each salvage packaging must be marked with the proper shipping name of the hazardous material inside the packaging and the name and address of the consignee. In addition, the packaging must be marked "SALVAGE" or "SALVAGE DRUM".

(4) Each drum shall be labeled as prescribed for the respective material.

(5) The shipper shall prepare shipping papers in accordance with subpart C of part 172 of this subchapter.

(6) The overpack requirements of §173.25 do not apply to drums used in accordance with this paragraph.

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7) A salvage packaging marked "T" in accordance with applicable provisions in the UN Recommendations may be used.

(d) *Salvage cylinders.* Cylinders of hazardous materials that are damaged or leaking may be overpacked in a non-DOT specification full opening hinged head or fully removable head steel salvage cylinder under the following conditions:

(1) Only a cylinder containing a Division 2.1, 2.2, 2.3, 3, 6.1, or a Class 8 material may be overpacked in a salvage cylinder. A cylinder containing acetylene may not be overpacked in a salvage cylinder.

(2) Each salvage cylinder—

(i) Must be designed, constructed and marked in accordance with Section VIII, Division I of the ASME Code (IBR, see §171.7 of this subchapter) with a minimum design margin of 4 to 1. Salvage cylinders may not be equipped with a pressure relief device. Damaged cylinders must be securely positioned in the salvage cylinder to prevent excessive movement. The overpack requirements of §173.25 of this part do not apply to salvage cylinders used in accordance with this section.

(ii) Must have a maximum water capacity of 450 L (119 gallons).

(iii) Except for liquefied nitrous oxide and carbon dioxide, contents of the damaged or leaking cylinder must be limited in pressure and volume so that if totally discharged into the salvage cylinder, the pressure in the salvage cylinder will not exceed 5/4 of the MAWP at 55 °C (131 °F).

(iv) Must have gaskets, valves and fittings that are compatible with the hazardous materials contained within.



(3) Each salvage cylinder must be plainly and durably marked. Unless otherwise specified, the markings below must be in the same area on any portion of the upper end:

(i) The proper shipping name of the hazardous material contained inside the packaging;

(ii) The name and address of the consignee or consignor;

(iii) The name and address or registered symbol of the manufacturer; and

(iv) The words "SALVAGE CYLINDER" in letters at least 50 mm (2.0 inches) high on opposite sides near the middle of the cylinder; stamping on the sidewall is not authorized.

(4) Each salvage cylinder must be labeled for the hazardous material contained inside the packaging.

(5) The shipper must prepare shipping papers in accordance with subpart C of part 172 of this subchapter.

(6) Transportation is authorized by motor vehicle only.

(7) Each salvage cylinder must be cleaned and purged after each use.

(8) In addition to the training requirements of §§172.700 through 172.704 of this subchapter, a person who loads, unloads or transports a salvage cylinder must be trained in handling, loading and unloading the salvage cylinder.

(9) Cylinder Requalification: At least once every five years, each cylinder must be visually inspected (internally and externally) in accordance with CGA Pamphlet C-6 (IBR, see §171.7 of this subchapter) and pressure tested. A minimum test pressure of at least 1 1/2 times MAWP must be maintained for at least 30 seconds. The cylinder must be examined under test pressure and removed from service if a leak or a defect is found.

(i) The retest and inspection must be performed by a person familiar with salvage cylinders and trained and experienced in the use of the inspection and testing equipment.

(ii) Each salvage cylinder that is successfully requalified must be durably and legibly marked with the word "Tested" followed by the requalification date (month/year), e.g., "Tested 9/04." The marking must be in letters and numbers at least 12 mm (0.5 inches) high. The requalification marking may be placed on any portion of the upper end of the cylinder near the marking required in (d)(3) of this

section or on a metal plate permanently secured to the cylinder. Stamping on the cylinder sidewall is not authorized.

(10) Record retention: The owner of each salvage cylinder or his authorized agent shall retain a record of the most recent visual inspection and pressure test until the salvage cylinder is requalified. The records must be made available to a DOT representative upon request.

*(e) Emergency transportation of DOT 3A480 or 3AA480 cylinders and DOT 106A500 multi-unit tank car tanks.* (1) A DOT 3A480 or DOT 3AA480 cylinder containing chlorine or sulphur dioxide that has developed a leak in a valve or fusible plug may be repaired temporarily by trained personnel using a Chlorine Institute Kit "A" (IBR, see §171.7 of this subchapter). The repaired cylinder is authorized to be transported by private or contract carrier one time, one way, from the point of discovery to a proper facility for discharge and examination.

(2) A DOT 106A500 multi-unit tank car tank containing chlorine or sulphur dioxide that has developed a leak in the valve or fusible plug may be temporarily repaired by trained personnel using a Chlorine Institute Kit "B" (IBR, see §171.7 of this subchapter). The repaired tank is authorized to be transported by private or contract carrier one time, one way, from the point of discovery to a proper facility for discharge and examination.

(3) Training for personnel making the repairs in paragraphs (d)(1) and (d)(2) of this section must include:

- (i) Proper use of the devices and tools in the applicable kits;
- (ii) Use of respiratory equipment and all other safety equipment; and
- (iii) Knowledge of the properties of chlorine and sulphur dioxide.

(4) Packagings repaired with "A" or "B" kits must be properly blocked and braced to ensure the packagings are secured in the transport vehicle.

#### **§ 173.4 Small quantity exceptions.**

(a) Small quantities of Class 3, Division 4.1, Division 4.2 (PG II and III), Division 4.3 (PG II and III), Division 5.1, Division 5.2, Division 6.1, Class 7, Class 8, and Class 9 materials that also meet the definition of one or more of these hazard classes, are not subject to any other requirements of this subchapter when—

(1) The maximum quantity of material per inner receptacle or article is limited to—

- (i) Thirty (30) mL (1 ounce) for authorized liquids, other than Division 6.1, Packing Group I, Hazard Zone A or B materials;

- (ii) Thirty (30) g (1 ounce) for authorized solid materials;
- (iii) One (1) g (0.04 ounce) for authorized materials meeting the definition of a Division 6.1, Packing Group I, Hazard Zone A or B material; and
- (iv) An activity level not exceeding that specified in §§173.421, 173.424, 173.425 or 173.426, as appropriate, for a package containing a Class 7 (radioactive) material.

(2) With the exception of temperature sensing devices, each inner receptacle:

- (i) Is not liquid-full at 55 °C (131 °F), and
- (ii) Is constructed of plastic having a minimum thickness of no less than 0.2 mm (0.008 inch), or earthenware, glass, or metal;

3) Each inner receptacle with a removable closure has its closure held securely in place with wire, tape, or other positive means;

(4) Unless equivalent cushioning and absorbent material surrounds the inside packaging, each inner receptacle is securely packed in an inside packaging with cushioning and absorbent material that:

- (i) Will not react chemically with the material, and
- (ii) Is capable of absorbing the entire contents (if a liquid) of the receptacle;

(5) The inside packaging is securely packed in a strong outside packaging;

(6) The completed package, as demonstrated by prototype testing, is capable of sustaining—

(i) Each of the following free drops made from a height of 1.8 m (5.9 feet) directly onto a solid unyielding surface without breakage or leakage from any inner receptacle and without a substantial reduction in the effectiveness of the package:

- (A) One drop flat on bottom;
- (B) One drop flat on top;
- (C) One drop flat on the long side;
- (D) One drop flat on the short side; and

(E) One drop on a corner at the junction of three intersecting edges; and

(ii) A compressive load as specified in §178.606(c) of this subchapter.

Note to paragraph (a)(6): Each of the tests in paragraph (a)(6) of this section may be performed on a different but identical package; *i.e.*, all tests need not be performed on the same package.

(7) Placement of the material in the package or packing different materials in the package does not result in a violation of §173.21;

(8) The gross mass of the completed package does not exceed 29 kg (64 pounds);

(9) The package is not opened or otherwise altered until it is no longer in commerce; and

(10) The shipper certifies conformance with this section by marking the outside of the package with the statement "This package conforms to 49 CFR 173.4."

(b) A package containing a Class 7 (radioactive) material also must conform to the requirements of §173.421(a)(1) through (a)(5) or §173.424(a) through (g), as appropriate.

(c) Packages which contain a Class 2, Division 4.2 (PG I), or Division 4.3 (PG I) material conforming to paragraphs (a)(1) through (a)(10) of this section may be offered for transportation or transported if specifically approved by the Associate Administrator.

(d) Lithium batteries and cells are not eligible for the exceptions provided in this section.

**§ 173.13 Exceptions for Class 3, Divisions 4.1, 4.2, 4.3, 5.1, 6.1, and Classes 8 and 9 materials**

(a) A Class 3, 8 or 9, or Division 4.1, 4.2, 4.3, 5.1, or 6.1 material is excepted from the labeling (except for the CARGO AIRCRAFT ONLY label), placarding and segregation requirements of this subchapter if prepared for transportation in accordance with the requirements of this section. A material that meets the definition of a material poisonous by inhalation may not be offered for transportation or transported under provisions of this section.

(b) A hazardous material conforming to the requirements of this section may be transported by motor vehicle and rail car. In addition, packages prepared in accordance with this section may be transported by aircraft under the following conditions:

(1) *Cargo-only aircraft.* Only hazardous materials permitted to be transported aboard either a passenger or cargo-only aircraft by column (9A) or (9B) of the Hazardous Materials Table in §172.101 of this subchapter are authorized aboard cargo-only aircraft.

(2) *Passenger carrying aircraft.* Only hazardous materials permitted to be transported aboard a passenger aircraft by column (9A) of the Hazardous Materials Table in §172.101 of this subchapter are authorized aboard passenger aircraft. The completed package, assembled as for transportation, must be successfully tested in accordance with part 178 of this subchapter at the Packing Group I level. A hazardous material which meets the definition of a Division 5.1 (oxidizer) at the Packing Group I level in accordance with §173.127(b)(1)(i) of this subchapter may not be transported aboard a passenger aircraft.

(3) Packages offered for transportation aboard either passenger or cargo-only aircraft must meet the requirements for transportation by aircraft specified in §173.27 of this subchapter.

(c) A hazardous material permitted by paragraph (a) of this section must be packaged as follows:

(1) For liquids:

(i) The hazardous material must be placed in a tightly closed glass, plastic or metal inner packaging with a maximum capacity not exceeding 1.2 L. Sufficient outage must be provided such that the inner packaging will not become liquid full at 55 °C (130 °F). The net quantity (measured at 20 °C (68 °F)) of liquid in any inner packaging may not exceed 1 L. For transportation by aircraft, the net quantity in one package may not exceed the quantity specified in columns (9A) or (9B), as appropriate.

(ii) The inner packaging must be placed in a hermetically-sealed barrier bag which is impervious to the lading, and then wrapped in a non-reactive absorbent material in sufficient quantity to completely absorb the contents of the inner packaging, and placed in a snugly fitting, metal can.

(iii) The metal can must be securely closed. For liquids that are in Division 4.2 or 4.3, the metal can must be hermetically sealed. For Division 4.2 materials in Packing Group I, the metal can must be tested in accordance with part 178 of this subchapter at the Packing Group I performance level.

(iv) The metal can must be placed in a fiberboard box that is placed in a hermetically-sealed barrier bag which is impervious to the lading.

(v) The intermediate packaging must be placed inside a securely closed, outer packaging conforming to §173.201.

(vi) Not more than four intermediate packagings are permitted in an outer packaging.

(2) For solids:

(i) The hazardous material must be placed in a tightly closed glass, plastic or metal inner packaging. The net quantity of material in any inner packaging may not exceed 2.85kg (6.25 pounds). For transportation by aircraft, the net quantity in one package may not exceed the quantity specified in columns (9A) or (9B), as appropriate.

(ii) The inner packaging must be placed in a hermetically-sealed barrier bag which is impervious to the lading.

(iii) The barrier bag and its contents must be placed in a fiberboard box that is placed in a hermetically-sealed barrier bag which is impervious to the lading.

(iv) The intermediate packaging must be placed inside an outer packaging conforming to §173.211.

(v) Not more than four intermediate packagings are permitted in an outer packaging.

(d) The outside of the package must be marked, in association with the proper shipping name, with the statement: "This package conforms to 49 CFR 173.13."

#### **§ 173.24 General requirements for packagings and packages.**

(a) Applicability. Except as otherwise provided in this subchapter, the provisions of this section apply to—

(1) Bulk and non-bulk packagings;

(2) New packagings and packagings which are reused; and

(3) Specification and non-specification packagings.

(b) Each package used for the shipment of hazardous materials under this subchapter shall be designed, constructed, maintained, filled, its contents so limited, and closed, so that under conditions normally incident to transportation—

(1) Except as otherwise provided in this subchapter, there will be no identifiable (without the use of instruments) release of hazardous materials to the environment;

(2) The effectiveness of the package will not be substantially reduced; for example, impact resistance, strength, packaging compatibility, etc. must be maintained for the minimum and maximum temperatures, changes in humidity

and pressure, and shocks, loadings and vibrations, normally encountered during transportation;

(3) There will be no mixture of gases or vapors in the package which could, through any credible spontaneous increase of heat or pressure, significantly reduce the effectiveness of the packaging;

(4) There will be no hazardous material residue adhering to the outside of the package during transport.

(c) Authorized packagings. A packaging is authorized for a hazardous material only if—

(1) The packaging is prescribed or permitted for the hazardous material in a packaging section specified for that material in Column 8 of the §172.101 table and conforms to applicable requirements in the special provisions of Column 7 of the §172.101 table and, for specification packagings (but not including UN standard packagings manufactured outside the United States), the specification requirements in parts 178 and 179 of this subchapter; or

(2) The packaging is permitted under, and conforms to, provisions contained in §§171.11, 171.12, 171.12a, 173.3, 173.4, 173.5, 173.7, 173.27, or 176.11 of this subchapter.

(d) *Specification packagings and UN standard packagings manufactured outside the U.S.—*(1) *Specification packagings.* A specification packaging, including a UN standard packaging manufactured in the United States, must conform in all details to the applicable specification or standard in part 178 or part 179 of this subchapter.

(2) UN standard packagings manufactured outside the United States. A UN standard packaging manufactured outside the United States, in accordance with national or international regulations based on the UN Recommendations (IBR, see §171.7 of this subchapter), may be imported and used and is considered to be an authorized packaging under the provisions of paragraph (c)(1) of this section, subject to the following conditions and limitations:

(i) The packaging fully conforms to applicable provisions in the UN Recommendations and the requirements of this subpart, including reuse provisions;

(ii) The packaging is capable of passing the prescribed tests in part 178 of this subchapter applicable to that standard; and

(iii) The competent authority of the country of manufacture provides reciprocal treatment for UN standard packagings manufactured in the U.S.

(e) Compatibility. (1) Even though certain packagings are specified in this part, it is, nevertheless, the responsibility of the person offering a hazardous material for

transportation to ensure that such packagings are compatible with their lading. This particularly applies to corrosivity, permeability, softening, premature aging and embrittlement.

(2) Packaging materials and contents must be such that there will be no significant chemical or galvanic reaction between the materials and contents of the package.

(3) Plastic packagings and receptacles. (i) Plastic used in packagings and receptacles must be of a type compatible with the lading and may not be permeable to an extent that a hazardous condition is likely to occur during transportation, handling or refilling.

(ii) Each plastic packaging or receptacle which is used for liquid hazardous materials must be capable of withstanding without failure the procedure specified in appendix B of this part ("Procedure for Testing Chemical Compatibility and Rate of Permeation in Plastic Packagings and Receptacles"). The procedure specified in appendix B of this part must be performed on each plastic packaging or receptacle used for Packing Group I materials. The maximum rate of permeation of hazardous lading through or into the plastic packaging or receptacles may not exceed 0.5 percent for materials meeting the definition of a Division 6.1 material according to §173.132 and 2.0 percent for other hazardous materials, when subjected to a temperature no lower than—

(A) 18 °C (64 °F) for 180 days in accordance with Test Method 1 in appendix B of this part;

(B) 50 °C (122 °F) for 28 days in accordance with Test Method 2 in appendix B of this part; or

(C) 60 °C (140 °F) for 14 days in accordance with Test Method 3 in appendix B of this part.

(iii) Alternative procedures or rates of permeation are permitted if they yield a level of safety equivalent to or greater than that provided by paragraph (e)(3)(ii) of this section and are specifically approved by the Associate Administrator.

(4) Mixed contents. Hazardous materials may not be packed or mixed together in the same outer packaging with other hazardous or nonhazardous materials if such materials are capable of reacting dangerously with each other and causing—

(i) Combustion or dangerous evolution of heat;

(ii) Evolution of flammable, poisonous, or asphyxiant gases; or

(iii) Formation of unstable or corrosive materials.



(5) Packagings used for solids, which may become liquid at temperatures likely to be encountered during transportation, must be capable of containing the hazardous material in the liquid state.

(f) Closures. (1) Closures on packagings shall be so designed and closed that under conditions (including the effects of temperature, pressure and vibration) normally incident to transportation—

(i) Except as provided in paragraph (g) of this section, there is no identifiable release of hazardous materials to the environment from the opening to which the closure is applied; and

(ii) The closure is leakproof and secured against loosening. For air transport, stoppers, corks or other such friction closures must be held in place by positive means.

(2) Except as otherwise provided in this subchapter, a closure (including gaskets or other closure components, if any) used on a specification packaging must conform to all applicable requirements of the specification and must be closed in accordance with information, as applicable, provided by the manufacturer's notification required by §178.2 of this subchapter.

(g) *Venting*. Venting of packagings, to reduce internal pressure which may develop by the evolution of gas from the contents, is permitted only when—

(1) Transportation by aircraft is not involved;

(2) Except as otherwise provided in this subchapter, the evolved gases are not poisonous, likely to create a flammable mixture with air or be an asphyxiant under normal conditions of transportation;

(3) The packaging is designed so as to preclude an unintentional release of hazardous materials from the receptacle;

(4) For bulk packagings, other than IBCs, venting is authorized for the specific hazardous material by a special provision in the §172.101 table or by the applicable bulk packaging specification in part 178 of this subchapter; and

(5) Intermediate bulk packagings (IBCs) may be vented when required to reduce internal pressure that may develop by the evolution of gas subject to the requirements of paragraphs (g)(1) through (g)(3) of this section. The IBC must be of a type that has successfully passed (with the vent in place) the applicable design qualification tests with no release of hazardous material.

(h) Outage and filling limits—(1) *General*. When filling packagings and receptacles for liquids, sufficient ullage (outage) must be left to ensure that neither leakage nor permanent distortion of the packaging or receptacle will occur as a result of an expansion of the liquid caused by temperatures likely to be encountered during transportation. Requirements for outage and filling limits

for non-bulk and bulk packagings are specified in §§173.24a(d) and 173.24b(a), respectively.

(2) *Compressed gases and cryogenic liquids.* Filling limits for compressed gases and cryogenic liquids are specified in §§173.301 through 173.306 for cylinders and §§173.314 through 173.319 for bulk packagings.

(i) *Air transportation.* Packages offered or intended for transportation by aircraft are subject to requirements additional to those of other modes of transport (e.g., quantity limitations, requirements for absorbent material, pressure differential requirements, appropriate closure procedures, and specific packaging requirements) and must conform to the general requirements for transportation by aircraft in §173.27.

### **§ 173.24a Additional general requirements for non-bulk packagings and packages**

(a) *Packaging design.* Except as provided in §172.312 of this subchapter:

(1) *Inner packaging closures.* A combination packaging containing liquid hazardous materials must be packed so that closures on inner packagings are upright.

(2) *Friction.* The nature and thickness of the outer packaging must be such that friction during transportation is not likely to generate an amount of heat sufficient to alter dangerously the chemical stability of the contents.

(3) *Securing and cushioning.* Inner packagings of combination packagings must be so packed, secured and cushioned to prevent their breakage or leakage and to control their shifting within the outer packaging under conditions normally incident to transportation. Cushioning material must not be capable of reacting dangerously with the contents of the inner packagings or having its protective properties significantly weakened in the event of leakage.

(4) *Metallic devices.* Nails, staples and other metallic devices shall not protrude into the interior of the outer packaging in such a manner as to be likely to damage inner packagings or receptacles.

(5) *Vibration.* Each non-bulk package must be capable of withstanding, without rupture or leakage, the vibration test procedure specified in §178.608 of this subchapter.

(b) *Non-bulk packaging filling limits.* (1) A single or composite non-bulk packaging may be filled with a liquid hazardous material only when the specific gravity of the material does not exceed that marked on the packaging, or a specific gravity of 1.2 if not marked, except as follows:

(i) A Packing Group I packaging may be used for a Packing Group II material with a specific gravity not exceeding the greater of 1.8, or 1.5 times the specific

gravity marked on the packaging, provided all the performance criteria can still be met with the higher specific gravity material;

(ii) A Packing Group I packaging may be used for a Packing Group III material with a specific gravity not exceeding the greater of 2.7, or 2.25 times the specific gravity marked on the packaging, provided all the performance criteria can still be met with the higher specific gravity material; and

(iii) A Packing Group II packaging may be used for a Packing Group III material with a specific gravity not exceeding the greater of 1.8, or 1.5 times the specific gravity marked on the packaging, provided all the performance criteria can still be met with the higher specific gravity material.

(2) Except as otherwise provided in this section, a non-bulk packaging may not be filled with a hazardous material to a gross mass greater than the maximum gross mass marked on the packaging.

(3) A single or composite non-bulk packaging which is tested and marked for liquid hazardous materials may be filled with a solid hazardous material to a gross mass, in kilograms, not exceeding the rated capacity of the packaging in liters, multiplied by the specific gravity marked on the packaging, or 1.2 if not marked. In addition:

(i) A single or composite non-bulk packaging which is tested and marked for Packing Group I liquid hazardous materials may be filled with a solid Packing Group II hazardous material to a gross mass, in kilograms, not exceeding the rated capacity of the packaging in liters, multiplied by 1.5, multiplied by the specific gravity marked on the packaging, or 1.2 if not marked.

(ii) A single or composite non-bulk packaging which is tested and marked for Packing Group I liquid hazardous materials may be filled with a solid Packing Group III hazardous material to a gross mass, in kilograms, not exceeding the rated capacity of the packaging in liters, multiplied by 2.25, multiplied by the specific gravity marked on the packaging, or 1.2 if not marked.

(iii) A single or composite non-bulk packaging which is tested and marked for Packing Group II liquid hazardous materials may be filled with a solid Packing Group III hazardous material to a gross mass, in kilograms, not exceeding the rated capacity of the packaging in liters, multiplied by 1.5, multiplied by the specific gravity marked on the packaging, or 1.2 if not marked.

(4) Packagings tested as prescribed in §178.605 of this subchapter and marked with the hydrostatic test pressure as prescribed in §178.503(a)(5) of this subchapter may be used for liquids only when the vapor pressure of the liquid conforms to one of the following:

(i) The vapor pressure must be such that the total pressure in the packaging (i.e., the vapor pressure of the liquid plus the partial pressure of air or other inert gases, less 100 kPa (15 psia)) at 55 °C (131 °F), determined on the basis of a

maximum degree of filling in accordance with paragraph (d) of this section and a filling temperature of 15 °C (59 °F)), will not exceed two-thirds of the marked test pressure;

(ii) The vapor pressure at 50 °C (122 °F) must be less than four-sevenths of the sum of the marked test pressure plus 100 kPa (15 psia); or

(iii) The vapor pressure at 55 °C (131 °F) must be less than two-thirds of the sum of the marked test pressure plus 100 kPa (15 psia).

(5) No hazardous material may remain on the outside of a package after filling.

(c) *Mixed contents.* (1) An outer non-bulk packaging may contain more than one hazardous material only when—

(i) The inner and outer packagings used for each hazardous material conform to the relevant packaging sections of this part applicable to that hazardous material;

(ii) The package as prepared for shipment meets the performance tests prescribed in part 178 of this subchapter for the packing group indicating the highest order of hazard for the hazardous materials contained in the package;

(iii) Corrosive materials (except ORM-D) in bottles are further packed in securely closed inner receptacles before packing in outer packagings; and

(iv) For transportation by aircraft, the total net quantity does not exceed the lowest permitted maximum net quantity per package as shown in Column 9a or 9b, as appropriate, of the §172.101 table. The permitted maximum net quantity must be calculated in kilograms if a package contains both a liquid and a solid.

(2) A packaging containing inner packagings of Division 6.2 materials may not contain other hazardous materials, except dry ice.

(d) Liquids must not completely fill a receptacle at a temperature of 55 °C (131 °F) or less.

### **§ 173.56 New explosives—definition and procedures for classification and approval**

(a) Definition of new explosive. For the purposes of this subchapter a *new explosive* means an explosive produced by a person who:

(1) Has not previously produced that explosive; or

(2) Has previously produced that explosive but has made a change in the formulation, design or process so as to alter any of the properties of the explosive. An explosive will not be considered a “new explosive” if an agency listed in paragraph (b) of this section has determined, and confirmed in writing to the Associate Administrator, that there are no significant differences in hazard characteristics from the explosive previously approved.

(b) Examination, classing and approval. Except as provided in paragraph (j) of this section, no person may offer a new explosive for transportation unless that person has specified to the examining agency the ranges of composition of ingredients and compounds, showing the intended manufacturing tolerances in the composition of substances or design of articles which will be allowed in that material or device, and unless it has been examined, classed and approved as follows:

(1) Except for an explosive made by or under the direction or supervision of the Department of Defense (DOD) or the Department of Energy (DOE), a new explosive must be examined and assigned a recommended shipping description, division and compatibility group, based on the tests and criteria prescribed in §§173.52, 173.57 and 173.58. The person requesting approval of the new explosive must submit to the Associate Administrator a report of the examination and assignment of a recommended shipping description, division, and compatibility group. If the Associate Administrator finds the approval request meets the regulatory criteria, the new explosive will be approved in writing and assigned an EX number. The examination must be performed by a person who is approved by the Associate Administrator under the provisions of subpart H of part 107 of this chapter and who—

- (i) Has (directly, or through an employee involved in the examination) at least ten years of experience in the examination, testing and evaluation of explosives;
- (ii) Does not manufacture or market explosives, and is not controlled by or financially dependent on any entity that manufactures or markets explosives, and whose work with respect to explosives is limited to examination, testing and evaluation; and
- (iii) Is a resident of the United States.

(2) A new explosive made by or under the direction or supervision of a component of the DOD may be examined, classed, and concurred in by:

- (i) U.S. Army Technical Center for Explosives Safety (SMCAC-EST), Naval Sea Systems Command (SEA-9934), or Air Force Safety Agency (SEW), when approved by the Chairman, DOD Explosives Board, in accordance with the DOD Explosives Hazard Classification Procedures (IBR, see §171.7 of the subchapter); or
- (ii) The agencies and procedures specified in paragraph (b)(1) of this section.

(3) A new explosive made by or under the direction or supervision of the Department of Energy (DOE) may be—

- (i) Examined by the DOE in accordance with the DOD Explosives Hazard Classification Procedures, and must be classed and approved by DOE; or

(ii) Examined, classed, and approved in accordance with paragraph (b)(1) of this section.

(4) For a material shipped under the description of “ammonium nitrate-fuel oil mixture (ANFO)”, the only test required for classification purposes is the Cap Sensitivity Test—Test Method 5(a) prescribed in the Explosive Test Manual (UN Manual of Tests and Criteria) (IBR, see §171.7 of the subchapter). The test must be performed by an agency listed in paragraph (b)(1), (b)(2), or (b)(3) of this section, the manufacturer, or the shipper. A copy of the test report must be submitted to the Associate Administrator before the material is offered for transportation, and a copy of the test report must be retained by the shipper for as long as that material is shipped. At a minimum, the test report must contain the name and address of the person or organization conducting the test, date of the test, quantitative description of the mixture, including prill size and porosity, and a description of the test results.

(c) Filing DOD or DOE approval report. DOD or DOE must file a copy of each approval, accompanied by supporting laboratory data, with the Associate Administrator and receive acknowledgement in writing before offering the new explosive for transportation, unless the new explosive is:

(1) Being transported under paragraph (d) or (e) of this section; or

(2) Covered by a national security classification currently in effect.

(d) Transportation of explosive samples for examination. Notwithstanding the requirements of paragraph (b) of this section with regard to the transportation of a new explosive that has not been approved, a person may offer a sample of a new explosive for transportation, by railroad, highway, or vessel from the place where it was produced to an agency identified in paragraph (b) of this section, for examination if—

(1) The new explosive has been assigned a tentative shipping description and class in writing by the testing agency;

(2) The new explosive is packaged as required by this part according to the tentative description and class assigned, unless otherwise specified in writing by the testing agency; and,

(3) The package is labeled as required by this subchapter and the following is marked on the package:

(i) The words “SAMPLE FOR LABORATORY EXAMINATION”;

(ii) The net weight of the new explosive; and

(iii) The tentative shipping name and identification number.

(e) Transportation of unapproved explosives for developmental testing. Notwithstanding the requirements of paragraph (b) of this section, the owner of a

new explosive that has not been examined or approved may transport that new explosive from the place where it was produced to an explosives testing range if—

- (1) It is not a primary (a 1.1A initiating) explosive or a forbidden explosive according to this subchapter;
- (2) It is described as a Division 1.1 explosive (substance or article) and is packed, marked, labeled, described on shipping papers and is otherwise offered for transportation in conformance with the requirements of this subchapter applicable to Division 1.1;
- (3) It is transported in a motor vehicle operated by the owner of the explosive; and
- (4) It is accompanied by a person, in addition to the operator of the motor vehicle, who is qualified by training and experience to handle the explosive.

(f) Notwithstanding the requirements of paragraphs (b) and (d) of this section, the Associate Administrator may approve a new explosive on the basis of an approval issued for the explosive by the competent authority of a foreign government, or when examination of the explosive by a person approved by the Associate Administrator is impracticable, on the basis of reports of tests conducted by disinterested third parties, or may approve the transportation of an explosives sample for the purpose of examination by a person approved by the Associate Administrator.

(g) Notwithstanding the requirements of paragraph (b) of this section, an explosive may be transported under §§171.11, 171.12, 171.12a or 176.11 of this subchapter without the approval of the Associate Administrator if the Associate Administrator has acknowledged, in writing, the acceptability of an approval issued by the competent authority of a foreign government pursuant to the provisions of the UN Recommendations, the ICAO Technical Instructions, the IMDG Code, or other national or international regulations based on the UN Recommendations. In such a case, a copy of the foreign competent authority approval, and a copy of the written acknowledgement of its acceptance must accompany each shipment of that explosive.

(h) The requirements of this section do not apply to cartridges, small arms which are:

- (1) Not a forbidden explosive under §173.54 of this subchapter;
- (2) Ammunition for rifle, pistol, or shotgun;
- (3) Ammunition with inert projectile or blank ammunition; and
- (4) Ammunition not exceeding 50 caliber for rifle or pistol cartridges or 8 gauge for shotgun shells.

Cartridges, small arms meeting the criteria of this paragraph (h) may be assigned a classification code of 1.4S by the manufacturer.

(i) If experience or other data indicate that the hazard of a material or a device containing an explosive composition is greater or less than indicated according to the definition and criteria specified in §§173.50, 173.56, and 173.58 of this subchapter, the Associate Administrator may specify a classification or except the material or device from the requirements of this subchapter.

(j) Fireworks. Notwithstanding the requirements of paragraph (b) of this section, Division 1.3 and 1.4 fireworks may be classed and approved by the Associate Administrator without prior examination and offered for transportation if the following conditions are met:

(1) The fireworks are manufactured in accordance with the applicable requirements in APA Standard 87–1 (IBR, see §171.7 of this subchapter);

(2) A thermal stability test is conducted on the device by the BOE, the BOM, or the manufacturer. The test must be performed by maintaining the device, or a representative prototype of a large device such as a display shell, at a temperature of 75 °C (167 °F) for 48 consecutive hours. When a device contains more than one component, those components which could be in physical contact with each other in the finished device must be placed in contact with each other during the thermal stability test; and

(3) The manufacturer applies in writing to the Associate Administrator following the applicable requirements in APA Standard 87–1, and is notified in writing by the Associate Administrator that the fireworks have been classed, approved, and assigned an EX-number. Each application must be complete, including all relevant background data and copies of all applicable drawings, test results, and any other pertinent information on each device for which approval is being requested. The manufacturer must sign the application and certify that the device for which approval is requested conforms to APA Standard 87–1 and that the descriptions and technical information contained in the application are complete and accurate. If the application is denied, the manufacturer will be notified in writing of the reasons for the denial. The Associate Administrator may require that the fireworks be examined by an agency listed in paragraph (b)(1) of this section.

### **§ 173.63 Packaging exceptions**

(a) Cord, detonating (UN 0065), having an explosive content not exceeding 6.5 g (0.23 ounces) per 30 centimeter length (one linear foot) may be offered for transportation domestically and transported as Cord, detonating (UN 0289), Division 1.4 Compatibility Group D (1.4D) explosives, if the gross weight of all packages containing Cord, detonating (UN 0065), does not exceed 45 kg (99 pounds) per:

(1) Transport vehicle, freight container, or cargo-only aircraft;



- (2) Off-shore down-hole tool pallet carried on an off-shore supply vessel;
- (3) Cargo compartment of a cargo vessel; or
- (4) Passenger-carrying aircraft used to transport personnel to remote work sites, such as offshore drilling units.

(b) *Cartridges, small arms, and cartridges power devices.* (1) Cartridges, small arms, and cartridges power devices (which are used to project fastening devices) which have been classed as a Division 1.4S explosive may be reclassified, offered for transportation, and transported as ORM-D material when packaged in accordance with paragraph (b)(2) of this section; such transportation is excepted from the requirements of subparts E (Labeling) and F (Placarding) of part 172 of this subchapter. Cartridges, small arms, and cartridges power devices that may be shipped as ORM-D material is limited to:

- (i) Ammunition for rifle, pistol or shotgun;
- (ii) Ammunition with inert projectiles or blank ammunition;
- (iii) Ammunition having no tear gas, incendiary, or detonating explosive projectiles;
- (iv) Ammunition not exceeding 12.7 mm (50 caliber or 0.5 inch) for rifle or pistol, cartridges or 8 gauge for shotshells; and
- (v) Cartridges, power devices which are used to project fastening devices.

(2) Packaging for cartridges, small arms, and cartridges power devices as ORM-D material must be as follows:

- (i) Ammunition must be packed in inside boxes, or in partitions which fit snugly in the outside packaging, or in metal clips;
- (ii) Primers must be protected from accidental initiation;
- (iii) Inside boxes, partitions or metal clips must be packed in securely-closed strong outside packagings;
- (iv) Maximum gross weight is limited to 30 kg (66 pounds) per package; and
- (v) Cartridges, power devices which are used to project fastening devices and 22 caliber rim-fire cartridges may be packaged loose in strong outside packagings.

(c)–(e) [Reserved]

(f) Detonators containing no more than 1 g explosive (excluding ignition and delay charges) that are electric blasting caps with leg wires 4 feet long or longer, delay connectors in plastic sheaths, or blasting caps with empty plastic tubing 12 feet long or longer may be packed as follows in which case they are excepted from the packaging requirements of §173.62:

- (1) No more than 50 detonators in one inner packaging;
  - (2) IME Standard 22 container (IBR, see §171.7 of this subchapter) or compartment is used as the outer packaging;
  - (3) No more than 1000 detonators in one outer packaging; and
  - (4) No material may be loaded on top of the IME Standard 22 container and no material may be loaded against the outside door of the IME Standard 22 compartment.
- (g) Detonators that are classed as 1.4B or 1.4S and contain no more than 1 g of explosive (excluding ignition and delay charges) may be packed as follows in which case they are excepted from the packaging requirements of §173.62:

- (1) No more than 50 detonators in one inner packaging;
- (2) IME Standard 22 container is used as the outer packaging;
- (3) No more than 1000 detonators in one outer packaging; and
- (4) Each inner packaging is marked "1.4B Detonators" or "1.4S Detonators", as appropriate.

**§ 173.150 Exceptions for Class 3 (flammable and combustible liquids)**

(a) *General.* Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the §172.101 Table of this subchapter.

(b) *Limited quantities.* Limited quantities of flammable liquids (Class 3) and combustible liquids are excepted from labeling requirements, unless the material also meets the definition of Division 6.1 or is offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

- (1) For flammable liquids in Packing Group I, inner packagings not over 0.5 L (0.1 gallon) net capacity each, packed in strong outer packagings;
- (2) For flammable liquids in Packing Group II, inner packagings not over 1.0 L (0.3 gallons) net capacity each, unless the material has a subsidiary hazard of Division 6.1, Packing Group II, in which case the inner packagings may not exceed 100 mL (3.38 ounces) net capacity each, packed in a strong outer packaging.

(3) For flammable liquids in Packing Group III and combustible liquids, inner packagings not over 5.0 L (1.3 gallons) net capacity each, packed in strong outer packagings.

(c) *Consumer commodities*. Except for a material that has a subsidiary hazard of Division 6.1, Packing Group II, a limited quantity which conforms to the provisions of paragraph (b) of this section and is a “consumer commodity” as defined in 171.8 of this subchapter, may be renamed “Consumer commodity” and reclassified as ORM–D material. In addition to the exceptions provided by paragraph (b) of this section, shipments of ORM–D materials are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or are offered for transportation and transported by aircraft, and are eligible for the exceptions provided in §173.156.

(d) *Alcoholic beverages*. An alcoholic beverage (wine and distilled spirits as defined in 27 CFR 4.10 and 5.11) is not subject to the requirements of this subchapter if it—

(1) Contains 24 percent or less alcohol by volume;

(2) Is in an inner packaging of 5 L (1.3 gallons) or less, and for transportation on passenger-carrying aircraft conforms to §175.10(a)(17) of this subchapter as checked or carry-on baggage; or

(3) Is a Packing Group III alcoholic beverage in a packaging of 250 L (66 gallons) or less, unless transported by air.

(e) *Aqueous solutions of alcohol*. An aqueous solution containing 24 percent or less alcohol by volume and no other hazardous material—

(1) May be reclassified as a combustible liquid.

(2) Is not subject to the requirements of this subchapter if it contains no less than 50 percent water.

(f) *Combustible liquids*. (1) A flammable liquid with a flash point at or above 38 °C (100 °F) that does not meet the definition of any other hazard class may be reclassified as a combustible liquid. This provision does not apply to transportation by vessel or aircraft, except where other means of transportation is impracticable.

(2) The requirements in this subchapter do not apply to a material classed as a combustible liquid in a non-bulk packaging unless the combustible liquid is a hazardous substance, a hazardous waste, or a marine pollutant.

(3) A combustible liquid that is in a bulk packaging or a combustible liquid that is a hazardous substance, a hazardous waste, or a marine pollutant is not subject to the requirements of this subchapter except those pertaining to:

(i) Shipping papers, waybills, switching orders, and hazardous waste manifests;

- (ii) Marking of packages;
  - (iii) Display of identification numbers on bulk packages;
  - (iv) For bulk packagings only, placarding requirements of subpart F of part 172 of this subchapter;
  - (v) Carriage aboard aircraft and vessels (for packaging requirements for transport by vessel, see §176.340 of this subchapter);
  - (vi) Reporting incidents as prescribed by §§171.15 and 171.16 of this subchapter;
  - (vii) Packaging requirements of subpart B of this part and, in addition, non-bulk packagings must conform with requirements of §173.203;
  - (viii) The requirements of §§173.1, 173.21, 173.24, 173.24a, 173.24b, 174.1, 177.804, 177.817, 177.834(j), and 177.837(d) of this subchapter;
  - (ix) The training requirements of subpart H of part 172 of this subchapter.
  - (x) Emergency response information requirements of subpart G of part 172.
- (4) A combustible liquid that is not a hazardous substance, a hazardous waste, or a marine pollutant is not subject to the requirements of this subchapter if it is a mixture of one or more components that—
- (i) Has a flash point at or above 93 °C (200 °F),
  - (ii) Comprises at least 99 percent of the volume of the mixture, and
  - (iii) Is not offered for transportation or transported as a liquid at a temperature at or above its flash point.

**§ 173.151 Exceptions for Class 4**

- (a) *General.* Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the §172.101 table of this subchapter.
- (b) *Limited quantities of Division 4.1.* Limited quantities of flammable solids (Division 4.1) in Packing Group II or III are excepted from labeling requirements, unless the material also meets the definition of Division 6.1 or is offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

(1) For flammable solids in Packing Group II, inner packagings not over 1.0 kg (2.2 pounds) net capacity each, unless the material has a subsidiary hazard of Division 6.1, Packing Group II, in which case the inner packagings may not exceed 0.5 kg (1.1 pounds) net capacity each, packed in a strong outer packaging.

(2) For flammable solids in Packing Group III, inner packagings not over 5.0 kg (11 pounds) net capacity each, packed in a strong outer packaging.

(c) *Consumer commodities.* Except for a material that has a subsidiary hazard of Division 6.1, Packing Group II, a limited quantity which conforms to the provisions of paragraph (b) of this section, and charcoal briquettes in packagings not exceeding 30 kg (66 pounds) gross weight, may be renamed “Consumer commodity” and reclassified as ORM–D material if the material is a “consumer commodity” as defined in §171.8 of this subchapter. In addition to the exceptions provided by paragraph (b) of this section, shipments of ORM–D materials are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft, and are eligible for the exceptions provided in §173.156.

(d) *Limited quantities of Division 4.3.* Limited quantities of dangerous when wet (Division 4.3) solids in Packing Group II or III are excepted from labeling requirements, unless the material also meets the definition of Division 6.1 or is offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

(1) For Division 4.3 solids in Packing Group II, inner packagings not over 0.5 kg (1.1 pound) net capacity each, packed in strong outer packagings; and

(2) For Division 4.3 solids in Packing Group III, inner packagings not over 1 kg (2.2 pounds) net capacity each, packed in strong outer packagings.

#### **§ 173.152 Exceptions for Division 5.1 (oxidizers) and Division 5.2 (organic peroxides)**

(a) *General.* Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the §172.101 table of this subchapter.

(b) *Limited quantities.* Limited quantities of oxidizers (Division 5.1) in Packing Group II and III and organic peroxides are excepted from labeling requirements, unless the material also meets the definition of Division 6.1 or is offered for transportation or transported by aircraft, and the specification packaging

requirements of this subchapter when packaged in combination packagings according to this paragraph. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

(1) For oxidizers in Packing Group II, inner packagings not over 1.0 L (0.3 gallon) net capacity each for liquids or not over 1.0 kg (2.2 pounds) net capacity each for solids, unless the material has a subsidiary hazard of Division 6.1, Packing Group II, in which case the inner packagings may not exceed 100 mL (3.38 ounces) for liquids or 0.5 kg (1.1 pounds) for solids, packed in a strong outer packaging.

(2) For oxidizers in Packing Group III, inner packagings not over 5 L (1.3 gallons) net capacity each for liquids or not over 5.0 kg (11 lbs) net capacity each for solids, and packed in strong outer packagings.

(3) For organic peroxides which do not require temperature control during transportation—

(i) For Type D, E, or F organic peroxides, inner packagings not over 125 mL (4.22 ounces) net capacity each for liquids or 500 g (17.64 ounces) net capacity for solids, packed in strong outer packagings.

(ii) For Type B or C organic peroxides, inner packagings not over 25 mL (0.845 ounces) net capacity each for liquids or 100 g (3.528 ounces) net capacity for solids, packed in strong outer packagings.

(4) For polyester resin kits consisting of a base material component (Class 3, Packing Group II or III) and an activator component (Type C, D, E, or F organic peroxide which does not require temperature control)—

(i) The organic peroxide component must be packed in inner packagings not over 125 mL (4.22 ounces) net capacity each for liquids or 500 g (17.64 ounces) net capacity each for solids;

(ii) The flammable liquid component must be packed in inner packagings not over 5 L (1.3 gallons) net capacity each for Packing Group II or III liquid; and

(iii) The flammable liquid component and the organic peroxide component may be packed in the same strong outer packaging provided they will not interact dangerously in the event of leakage.

(c) *Consumer commodities.* Except for a material that has a subsidiary hazard of Division 6.1, Packing Group II, a limited quantity which conforms to the provisions of paragraph (b) of this section, and is a “consumer commodity” as defined in §171.8 of this subchapter, may be renamed “Consumer commodity” and reclassified as ORM–D. In addition to the exceptions provided by paragraph

(b) of this section, shipments of ORM–D materials are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or are offered for transportation and transported by aircraft, and are eligible for the exceptions provided in §173.156.

### **§ 173.153 Exceptions for Division 6.1 (poisonous materials)**

**Note:** FedEx Ground does not handle Division 6.1 material unless packaged by a Special Permit or 49 CFR 173.13.

(a) *General.* Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the §172.101 table of this subchapter.

(b) *Limited quantities.* The exceptions in this paragraph do not apply to poison-by-inhalation materials. Limited quantities of poisonous materials (Division 6.1) in Packing Group II and III are excepted from the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

(1) For poisonous materials in Packing Group II, inner packagings not over 100 mL (3.38 ounces) each for liquids or 0.5 kg (1.1 pounds) each for solids, packed in a strong outer packaging.

(2) For poisonous materials in Packing Group III, inner packagings not over 4 L (1.0 gallon) each for liquids or 5.0 kg (11 pounds) each for solids, packed in a strong outer packaging.

(c) *Consumer commodities.* The following provisions apply to consumer commodities:

(1) A limited quantity of poisonous material in Packing Group III which conforms to the provisions of paragraph (b) of this section, and is a “consumer commodity” as defined in §171.8 of this subchapter, may be renamed “Consumer commodity” and reclassified as ORM–D.

(2) A poisonous material which is a drug or medicine and is a “consumer commodity” as defined in §171.8 of this subchapter, may be renamed “Consumer commodity” and reclassified as ORM-D material if packaged in a combination packaging not exceeding 30 kg (66 pounds) with inner packagings not over 250 mL (8 ounces) net capacity for liquids or 250 g (8.8 ounces) net capacity for solids packed in strong outer packagings. Each package must conform to the packaging requirements of subpart B of this part.

(3) Packages of ORM-D material are excepted from the specification packaging requirements of this subchapter and from the labeling requirements of subpart E of part 172 of this subchapter. Shipments of ORM-D material are eligible for the exceptions provided in §173.156 and in paragraph (b) of this section and are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, a hazardous waste, or a marine pollutant or unless offered for transportation or transported by aircraft

#### **§ 173.154 Exceptions for Class 8 (corrosive materials)**

(a) *General.* Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the §172.101 table of this subchapter.

(b) *Limited quantities.* Limited quantities of corrosive materials (Class 8) in Packing Group II and III are excepted from labeling requirements, unless the material also meets the definition of Division 6.1 or is offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

(1) For corrosive materials in Packing Group II, inner packagings not over 1.0 L (0.3 gallon) net capacity each for liquids or not over 1.0 kg (2.2 pounds) net capacity each for solids, unless the material has a subsidiary hazard of Division 6.1, Packing Group II in which case the inner packagings may not exceed 100 mL (3.38 ounces) for liquids or 0.5 kg (1.1 pounds) for solids, packed in a strong outer packaging.

(2) For corrosive materials in Packing Group III, in inner packagings not over 5.0 L (1.3 gallons) net capacity each for liquids, or not over 5.0 kg (11 lbs) net capacity each for solids, and packed in strong outer packagings.

(c) *Consumer commodities.* Except for a material that has a subsidiary hazard of Division 6.1, Packing Group II, a limited quantity which conforms to the provisions of paragraph (b) of this section, and is a “consumer commodity” as defined in §171.8 of this subchapter, may be renamed “Consumer commodity” and reclassified as ORM–D. In addition to the exceptions provided by paragraph (b) of this section, shipments of ORM–D materials are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or are offered for transportation and transported by aircraft, and are eligible for the exceptions provided in §173.156.



(d) *Materials corrosive to aluminum or steel only.* Except for a hazardous substance, a hazardous waste, or a marine pollutant, a material classed as a Class 8, Packing Group III, material solely because of its corrosive effect—

(1) On aluminum is not subject to any other requirements of this subchapter when transported by motor vehicle or rail car in a packaging constructed of materials that will not react dangerously with or be degraded by the corrosive material; or

(2) On steel is not subject to any other requirements of this subchapter when transported by motor vehicle or rail car in a bulk packaging constructed of materials that will not react dangerously with or be degraded by the corrosive material.

#### **§ 173.155 Exceptions for Class 9 (miscellaneous hazardous materials)**

(a) *General.* Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the §172.101 table of this subchapter.

(b) *Limited quantities.* Limited quantities of miscellaneous hazardous materials (Class 9) are excepted from labeling, unless offered or intended for transportation by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. In addition, shipments of these limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. The following combination packagings are authorized:

(1) For liquids, inner packagings not over 5.0 L (1.3 gallons) net capacity each, packed in strong outer packagings.

(2) For solids, inner packagings not over 5.0 kg (11 pounds) net capacity each, packed in strong outer packagings.

(c) *Consumer commodities.* A limited quantity which conforms to the provisions of paragraph (b) of this section and is a “consumer commodity” as defined in §171.8 of this subchapter, may be renamed “Consumer commodity” and reclassified as ORM-D material. In addition to the exceptions provided by paragraph (b) of this section, shipments of ORM-D materials are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, a hazardous waste, or a marine pollutant or unless offered for transportation or transported by aircraft, and are eligible for the exceptions provided in §173.156.

## **§ 173.164 Mercury (metallic and articles containing mercury)**

(a) For transportation by aircraft, mercury must be packaged in packagings which meet the requirements of part 178 of this subchapter at the Packing Group I performance level, as follows:

(1) In inner packagings of earthenware, glass or plastic containing not more than 3.5 kg (7.7 pounds) of mercury, or inner packagings which are glass ampoules containing not more than 0.5 kg (1.1 pounds) of mercury, or iron or steel quicksilver flasks containing not more than 35 kg (77 pounds) of mercury. The inner packagings or flasks must be packed in steel drums (1A2), steel jerricans (3A2), wooden boxes (4C1), (4C2), plywood boxes (4D), reconstituted wood boxes (4F), fiberboard boxes (4G), plastic boxes (4H2), plywood drums (1D) or fiber drums (1G).

(2) [Reserved]

(3) When inner packagings of earthenware, glass or plastic are used, they must be packed in the outer packaging with sufficient cushioning material to prevent breakage.

(4) Either the inner packagings or the outer packagings must have inner linings or bags of strong leakproof and puncture-resistant material impervious to mercury, completely surrounding the contents, so that the escape of mercury will be prevented irrespective of the position of the package.

(b) Manufactured articles or apparatuses, each containing not more than 100 mg (0.0035 ounce) of mercury and packaged so that the quantity of mercury per package does not exceed 1 g (0.035 ounce) are not subject to the requirements of this subchapter.

(c) Manufactured articles or apparatuses containing mercury are excepted from the specification packaging requirements of this subchapter when packaged as follows:

(1) Manufactured articles or apparatuses of which metallic mercury is a component part, such as manometers, pumps, thermometers, switches, etc. (for electron tubes, mercury vapor tubes and similar tubes, see paragraph (c)(3) of this section), must be in strong outer packagings, having sealed inner liners or bags of strong leakproof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package irrespective of its position. Mercury switches and relays are excepted from these packaging requirements, if they are totally enclosed, leakproof and in sealed metal or plastic units.

(2) Thermometers, switches and relays, each containing a total quantity of not more than 15 g (0.53 ounces) of mercury, are excepted from the requirements of this subchapter if installed as an integral part of a machine or apparatus and so

fitted that shock of impact damage, leading to leakage of mercury, is unlikely to occur under conditions normally incident to transport.

(3) Electron tubes, mercury vapor tubes and similar tubes must be packaged as follows:

(i) Tubes which are packed in strong outer packagings with all seams and joints sealed with self-adhesive, pressure-sensitive tape which will prevent the escape of mercury from the package, are authorized up to a total net quantity of 450 g (15.9 ounces) of mercury per package;

(ii) Tubes with more than 450 g (15.9 ounces) of mercury are authorized only when packed in strong outer packagings, having sealed inner liners or bags of strong leakproof and puncture-resistant material impervious to mercury which will prevent escape of mercury from the package irrespective of its position;

(iii) Tubes which do not contain more than 5 g (0.2 ounce) of mercury each and which are packed in the manufacturer's original packagings, are authorized up to a total net quantity of 30 g (1.1 ounces) of mercury per package;

(iv) Tubes which are completely jacketed in sealed leakproof metal cases are authorized in the manufacturer's original packagings.

(4) A person offering for transportation electron tubes, mercury vapor tubes, and similar tubes shall indicate the quantity of mercury therein on the shipping paper.

(5) Mercurial barometers conforming to paragraph (c)(1) of this section, which are loaded and unloaded from an aircraft under the supervision of, and accompanied in flight by, a National Weather Service official or similar United States agency official, are excepted from any other requirements of this subchapter.

(d) For transportation by other than aircraft, mercury must be packaged—

(1) In any packaging which meets the requirements of part 178 of this subchapter at the Packing Group III performance level; or

(2) In non-specification reusable metal packagings.

(e) Except for a hazardous substance or a hazardous waste or for transportation by aircraft or vessel, packages containing less than 0.45 kg (1.0 pound) net weight of mercury are not subject to the requirements of this subchapter.

#### **§ 173.166 Air bag inflators, air bag modules and seat-belt pretensioners**

(a) *Definitions.* An *air bag inflator* (consisting of a casing containing an igniter, a booster material, a gas generant and, in some cases, a pressure vessel (cylinder)) is a gas generator used to inflate an air bag in a supplemental restraint system in a motor vehicle. An *air bag module* is the air bag inflator plus an inflatable bag assembly. A *seat-belt pre-tensioner* contains similar hazardous

materials and is used in the operation of a seat-belt restraining system in a motor vehicle.

(b) *Classification.* An air bag inflator, air bag module, or seat-belt pretensioner may be classed as Class 9 (UN3268) if:

(1) The manufacturer has submitted each design type air bag inflator, air bag module, or seat-belt pretensioner to a person approved by the Associate Administrator, in accordance with §173.56(b), for examination and testing. The submission must contain a detailed description of the inflator or pretensioner or, if more than a single inflator or pretensioner is involved, the maximum parameters of each particular inflator or pretensioner design type for which approval is sought and details on the complete package. The manufacturer must submit an application, including the test results and report recommending the shipping description and classification for each device or design type to the Associate Administrator, and must receive written notification from the Associate Administrator that the device has been approved for transportation and assigned an EX number; or,

(2) The manufacturer has submitted an application, including a classification issued by the competent authority of a foreign government to the Associate Administrator, and received written notification from the Associate Administrator that the device has been approved for transportation and assigned an EX number.

(c) *EX numbers.* When offered for transportation, the shipping paper must contain the EX number or product code for each approved inflator, module or pretensioner in association with the basic description required by §172.202(a) of this subchapter. Product codes must be traceable to the specific EX number assigned to the inflator, module or pretensioner by the Associate Administrator. The EX number or product code is not required to be marked on the outside package.

(d) *Exceptions.* (1) An air bag module or seat-belt pretensioner that has been approved by the Associate Administrator and is installed in a motor vehicle or in completed vehicle components, such as steering columns or door panels, is not subject to the requirements of this subchapter.

(2) An air bag module containing an inflator that has been previously approved for transportation is not required to be submitted for further examination or approval.

(3) An air bag module containing an inflator that has previously been approved as a Division 2.2 material is not required to be submitted for further examination to be reclassified as a Class 9 material.

(4) *Shipments for recycling.* When offered for domestic transportation by highway, rail freight, cargo vessel or cargo aircraft, a serviceable air bag module or seat-belt pretensioner removed from a motor vehicle that was manufactured

as required for use in the United States may be offered for transportation and transported without compliance with the shipping paper requirement prescribed in paragraph (c) of this section. However, the word "Recycled" must be entered on the shipping paper immediately after the basic description prescribed in §172.202 of this subchapter. No more than one device is authorized in the packaging prescribed in paragraph (e)(1), (2) or (3) of this section. The device must be cushioned and secured within the package to prevent movement during transportation.

(5) Until October 1, 2005, approved "Air bag inflators, compressed gas, or Air bag modules, compressed gas or Seat-belt pretensioners, compressed gas," UN3353, packaged in a non-specification packaging before October 1, 2003, may be transported or offered for domestic transportation when described, marked, and labeled as a Division 2.2 material in accordance with the HMR in effect on September 30, 2003.

(e) *Packagings*. Rigid, outer packagings, meeting the general packaging requirements of part 173, and the packaging specification and performance requirements of part 178 of this subchapter at the Packing Group III performance level are authorized as follows. The packagings must be designed and constructed to prevent movement of the articles and inadvertent operation.

(1) 1A2, 1B2, 1G or 1H2 drums.

(2) 3A2 or 3H2 jerricans.

(3) 4C1, 4C2, 4D, 4F, 4G or 4H2 boxes.

(4) Reusable high strength plastic or metal containers or dedicated handling devices are authorized for shipment of air bag inflators, air bag modules, and seat-belt pretensioners from a manufacturing facility to the assembly facility, subject to the following conditions:

(i) The gross weight of the container or handling device may not exceed 1000 kg (2205 pounds). The container or handling device structure must provide adequate support to allow them to be stacked at least three high with no damage to the containers or devices.

(ii) If not completely enclosed by design, the container or handling device must be covered with plastic, fiberboard, or metal. The covering must be secured to the container by banding or other comparable methods.

(iii) Internal dunnage must be sufficient to prevent shifting of the devices within the container.

(5) Packagings specified in the approval document issued by the Associate Administrator in accordance with paragraph (e) of this section are also authorized.

(f) *Labeling*. Notwithstanding the provisions of §172.402 of this subchapter, each package or handling device must display a CLASS 9 label. Additional labeling is not required when the package contains no hazardous materials other than the devices.

### **§ 173.170 Black powder for small arms**

Black powder for small arms that has been classed in Division 1.1 may be reclassified as a Division 4.1 material, for domestic transportation by motor vehicle, rail freight, and cargo vessel only, subject to the following conditions:

(a) The powder must be examined and approved for Division 1.1 and Division 4.1 classification in accordance with §§173.56 and 173.58;

(b) The total quantity of black powder in one motor vehicle, rail car, or freight container may not exceed 45.4 kg (100 pounds) net mass, and no more than four freight containers may be on board one cargo vessel;

(c) The black powder must be packed in inner metal or heavy wall conductive plastic receptacles not over 454 g (16 ounces) net capacity each, with no more than 25 cans in one outer UN 4G fiberboard box. The inner packagings must be arranged and protected so as to prevent simultaneous ignition of the contents. The complete package must be of the same type which has been examined as required in §173.56;

(d) Each completed package must be marked "BLACK POWDER FOR SMALL ARMS" and "NA 0027"; and

(e) Each package must bear the FLAMMABLE SOLID label.

### **§ 173.171 Smokeless powder for small arms**

Smokeless powder for small arms which has been classed in Division 1.3 may be reclassified in Division 4.1, for transportation by motor vehicle, rail car, vessel, or cargo-only aircraft, subject to the following conditions:

(a) The powder must be examined and approved for a Division 1.3 and Division 4.1 classification in accordance with §§173.56 and 173.58 of this part.

(b) The total quantity of smokeless powder may not exceed 45.4 kg (100 pounds) net mass in:

(1) One rail car, motor vehicle, or cargo-only aircraft; or

(2) One freight container on a vessel, not to exceed four freight containers per vessel.

(c) Only combination packagings with inner packagings not exceeding 3.6 kg (8 pounds) net mass are authorized. Inner packagings must be arranged and protected so as to prevent simultaneous ignition of the contents. The complete

package must be of the same type which has been examined as required in §173.56 of this part.

(d) Inside packages that have been examined and approved by the Associate Administrator may be packaged in UN 4G fiberboard boxes meeting the Packing Group I performance level, provided all inside containers are packed to prevent shifting and the net weight of smokeless powder in any one box does not exceed 7.3 kg (16 pounds).

### **§ 173.185 Lithium batteries and cells**

(a) Except as otherwise provided in this subpart, a lithium cell or battery is authorized for transportation only if it conforms to the provisions of this section. For the purposes of this subchapter, “lithium content” means the mass of lithium in the anode of a lithium metal or lithium alloy cell, except in the case of a lithium ion cell where the “equivalent lithium content” in grams is calculated to be 0.3 times the rated capacity in ampere-hours. The lithium-equivalent content of a battery equals the sum of the grams of lithium-equivalent content contained in the component cells of the battery.

(b) *Exceptions.* Except for primary (non-rechargeable) lithium batteries and cells transported aboard passenger-carrying aircraft, cells and batteries are not subject to any other requirements of this subchapter if they meet the following:

(1) Each cell with a liquid cathode may contain not more than 0.5 g of lithium content. Each cell with a solid cathode may contain not more than 1.0 g of lithium content. Each lithium ion cell may contain not more than 1.5 g of equivalent lithium content;

(2) Each battery with a liquid cathode may contain an aggregate quantity of not more than 1.0 g of lithium content. Each battery with a solid cathode may contain an aggregate quantity of not more than 2.0 g of lithium content. Each lithium-ion battery may contain an aggregate quantity of not more than 8.0 grams of equivalent lithium content;

(3) Each cell or battery containing a liquid cathode must be hermetically sealed;

(4) Cells and batteries must be packed in such a way so as to prevent short circuits and must be packed in strong packagings, except when installed in equipment; and

(5) The outside of each package that contains a primary (non-rechargeable) lithium battery or cell must be marked “PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT” on a background of contrasting color, in letters:

(i) At least 12 mm (0.5 inch) in height on packages having a gross mass of more than 30 kg (66 pounds); or

(ii) At least 6 mm (0.25 inch) on packages having a gross mass of 30 kg (66 pounds) or less; and

(6) If when fully charged, the aggregate lithium content of the anodes in a liquid cathode battery is more than 0.5 g, or the aggregate lithium content of the anodes in a solid cathode battery is more than 1.0 g, then the battery may not contain a liquid or gas that is a hazardous material according to this subchapter unless the liquid or gas, if free, would be completely absorbed or neutralized by other materials in the battery.

(c) Except for primary lithium (non-rechargeable) batteries and cells transported aboard passenger-carrying aircraft, cells and batteries are not subject to any other requirements of this subchapter if they meet the following:

(1) The lithium content of the anode of each cell, when fully charged, is not more than 5 g;

(2) The aggregate lithium content of the anodes of each battery, when fully charged, is not more than 25 g;

(3) Each cell or battery is of the type proven to be non-dangerous by testing in accordance with Tests in the UN Manual of Tests and Criteria (IBR; see §171.7 of this subchapter). Such testing must be carried out on each type of cell or battery prior to the initial transport of that type. A cell or battery and equipment containing a cell or battery which was first transported prior to January 1, 2006 and is of a type proven to meet the criteria of Class 9 by testing in accordance with the tests in the UN Manual of Tests and Criteria, Third Revised Edition, 1999 is not required to be retested;

(4) The outside of each package that contains a primary (non-rechargeable) lithium battery or cell must be marked "PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" on a background of contrasting color, in letters:

(i) At least 12 mm (0.5 inch) in height on packages having a gross mass of more than 30 kg (66 pounds); or

(ii) At least 6 mm (0.25 inch) on packages having a gross mass of 30 kg (66 pounds) or less; and

(5) Cells and batteries are designed or packed in such a way as to prevent short circuits under conditions normally encountered in transportation.

(d) Except for transportation aboard passenger-carrying aircraft, cells and batteries and equipment containing cells and batteries that were first transported prior to January 1, 1995, and were assigned to Class 9 on the basis of the requirements of this subchapter in effect on October 1, 1993, may continue to be transported in accordance with the applicable requirements in effect on October 1, 1993.



(e) Cells and batteries may be transported as items of Class 9 if they meet the requirements in paragraphs (e)(1) through (e)(7) of this section:

(1) Each cell and battery must be equipped with an effective means of preventing external short circuits.

(2) Each cell and battery must incorporate a safety venting device or be designed in a manner that will preclude a violent rupture under conditions normally incidental to transportation.

(3) Batteries containing cells or series of cells connected in parallel must be equipped with effective means, (such as diodes, fuses, etc.) as necessary to prevent dangerous reverse current flow.

(4) Authorized outer packagings: rigid outer packagings that conform to the general packaging requirements of part 173 and the packaging specification and performance requirements of part 178 of this subchapter at the Packing Group II performance level. Cells and batteries must be packed in such a manner as to effectively prevent short circuits through the use of inner packagings, dividers, or other suitable means.

(5) [Reserved]

(6) Each cell or battery is of the type proven to meet the lithium battery requirements in the UN Manual of Tests and Criteria (IBR; see §171.7 of this subchapter). A cell or battery and equipment containing a cell or battery of a design type which was first transported prior to January 1, 2006 and is of a type proven to meet the criteria of Class 9 by testing in accordance with the tests in the UN Manual of Tests and Criteria, Third Revised Edition, 1999 is not required to be retested;

(7) Except as provided in paragraph (h) of this section, cells and batteries with a liquid cathode containing sulfur dioxide, sulfuryl chloride or thionyl chloride may not be offered for transportation or transported if any cell has been discharged to the extent that the open circuit voltage is less than two volts, or is less than two-thirds of the voltage of the fully charged cell, whichever is less.

(f) Equipment containing or packed with cells and batteries meeting the requirements of paragraph (b) or (c) of this section is excepted from all other requirements of this subchapter.

(g) Equipment containing or packed with cells and batteries may be transported as items of Class 9 if the batteries and cells meet all requirements of paragraph (e) of this section and are packaged as follows:

(1) Equipment containing cells and batteries must be packed in a strong outer packaging that is waterproof or has a waterproof liner, unless the equipment is made waterproof by nature of its construction. The equipment must be secured

within the outer packaging and be packed as to effectively prevent moving, short circuits, and accidental operation during transport; and

(2) Cells and batteries packed with equipment must be packed in inner packagings conforming to (e)(4) of this section in such a manner as to effectively prevent moving and short circuits.

(h) Cells and batteries, for disposal, may be offered for transportation or transported to a permitted storage facility and disposal site by motor vehicle when they meet the following requirements:

(1) Be equipped with an effective means of preventing external short circuits; and

(2) Be packed in a strong outer packaging conforming to the requirements of §§173.24 and 173.24a. The packaging need not conform to performance requirements of part 178 of this subchapter.

(i) Cells and batteries and equipment containing or packed with cells and batteries which do not comply with the provisions of this section may be transported only if they are approved by the Associate Administrator.

(j) For testing purposes, when not contained in equipment, cells and batteries may be offered for transportation or transported by highway as items of Class 9. Packaging must conform with paragraph (e)(4) of this section.

(k) Batteries employing a strong, impact-resistant outer casing and exceeding a gross mass of 12 kg (26.5 lbs.), and assemblies of such batteries, may be packed in strong outer packagings, in protective enclosures (for example, in fully enclosed wooden slatted crates) or on pallets. Batteries must be secured to prevent inadvertent movement, and the terminals may not support the weight of other superimposed elements. Batteries packaged in this manner are not permitted for transportation by passenger aircraft, and may be transported by cargo aircraft only if approved by the Associate Administrator prior to transportation.

### **§ 173.186 Matches**

(a) Matches must be of a type which will not ignite spontaneously or undergo marked decomposition when subjected for 8 consecutive hours to a temperature of 93 °C (200 °F).

(b) *Definitions.* (1) *Fusee matches* are matches the heads of which are prepared with a friction-sensitive igniter composition and a pyrotechnic composition which burns with little or no flame, but with intense heat.

(2) *Safety matches* are matches combined with or attached to the box, book or card that can be ignited by friction only on a prepared surface.

(3) *Strike anywhere* matches are matches that can be ignited by friction on a solid surface.

(4) Wax “Vesta” matches are matches that can be ignited by friction either on a prepared surface or on a solid surface.

(c) Safety matches and wax “Vesta” matches must be tightly packed in securely closed inner packagings to prevent accidental ignition under conditions normally incident to transportation, and further packed in outer fiberboard, wooden, or other equivalent-type packagings. These matches in outer packagings not exceeding 23 kg (50 pounds) gross weight are not subject to any other requirement (except marking) of this subchapter. These matches may be packed in the same outer packaging with materials not subject to this subchapter.

(d) Strike-anywhere matches may not be packed in the same outer packaging with any material other than safety matches or wax “Vesta” matches, which must be packed in separate inner packagings.

(e) Packagings. Strike-anywhere matches must be tightly packed in securely closed chipboard, fiberboard, wooden, or metal inner packagings to prevent accidental ignition under conditions normally incident to transportation. Each inner packaging may contain no more than 700 strike-anywhere matches and must be packed in outer steel drums (1A2), aluminum drums (1B2), steel jerricans (3A2), wooden (4C1, 4C2), plywood (4D), reconstituted wood (4F) or fiberboard (4G) boxes, plywood (1D) or fiber (1G) drums. Gross weight of fiberboard boxes (4G) must not exceed 30 kg (66 pounds). Gross weight of other outer packagings must not exceed 45 kg (100 pounds).

#### **§ 173.217 Carbon dioxide, solid (dry ice)**

(a) Carbon dioxide, solid (dry ice), when offered for transportation or transported by aircraft or water, must be packed in packagings designed and constructed to permit the release of carbon dioxide gas to prevent a build-up of pressure that could rupture the packagings. Packagings must conform to the general packaging requirements of subpart B of this part but need not conform to the requirements of part 178 of this subchapter. For each shipment by air exceeding 2.3 kg (5 lbs) per package, advance arrangements must be made between the shipper and each carrier.

(b) Railroad cars and motor vehicles containing solid carbon dioxide, when accepted for transportation on board ocean vessels, must be conspicuously marked on two sides “WARNING CO<sub>2</sub> SOLID (DRY ICE).”

(c) Other packagings containing solid carbon dioxide, when offered or accepted for transportation on board ocean vessels, must be marked “CARBON DIOXIDE, SOLID—DO NOT STOW BELOW DECKS.”

(d) Not more than 200 kg (441 pounds) of solid carbon dioxide may be transported in any one cargo compartment or bin on any aircraft except by specific and special written arrangement between the shipper and the aircraft operator.

(e) Carbon dioxide, solid (dry ice) is excepted from the shipping paper and certification requirements of this subchapter if the requirements of paragraphs (a) and (d) of this section are complied with and the package is marked "Carbon dioxide, solid" or "Dry ice" and marked with an indication that the material being refrigerated is used for diagnostic or treatment purposes (e.g., frozen medical specimens).

### **§ 173.306 Limited quantities of compressed gases**

(a) Limited quantities of compressed gases for which exceptions are permitted as noted by reference to this section in §172.101 of this subchapter are excepted from labeling (except when offered for transportation by air) and, unless required as a condition of the exception, specification packaging requirements of this subchapter when packed in accordance with the following paragraphs. In addition, shipments are not subject to subpart F of part 172 of this subchapter, to part 174 of this subchapter except §174.24 and to part 177 of this subchapter except §177.817. Each package may not exceed 30 kg (66 pounds) gross weight.

(1) When in containers of not more than 4 fluid ounces capacity (7.22 cubic inches or less) except cigarette lighters. Special exceptions for shipment of certain compressed gases in the ORM-D class are provided in paragraph (h) of this section.

(2) When in metal containers filled with a material that is not classed as a hazardous material to not more than 90 percent of capacity at 70 °F. and then charged with nonflammable, nonliquefied gas. Each container must be tested to three times the pressure at 70 °F. and, when refilled, be retested to three times the pressure of the gas at 70 °F. Also, one of the following conditions must be met:

(i) Container is not over 1 quart capacity and charged to not more than 170 psig at 70 °F. and must be packed in a strong outside packaging, or

(ii) Container is not over 30 gallons capacity and charged to not more than 75 psig at 70 °F.

(3) When in a metal container for the sole purpose of expelling a nonpoisonous (other than a Division 6.1 Packing Group III material) liquid, paste or powder, provided all of the following conditions are met. Special exceptions for shipment of aerosols in the ORM-D class are provided in paragraph (h) of this section.

(i) Capacity must not exceed 1 L(61.0 cubic inches).

(ii) Pressure in the container must not exceed 180 psig at 130 °F. If the pressure exceeds 140 psig at 130 °F., but does not exceed 160 psig at 130 °F., a specification DOT 2P (§178.33 of this subchapter) inside metal container must be used; if the pressure exceeds 160 psig at 130 °F., a specification DOT 2Q (§178.33a of this subchapter) inside metal container must be used. In any event,

the metal container must be capable of withstanding without bursting a pressure of one and one-half times the equilibrium pressure of the content at 130 °F.

(iii) Liquid content of the material and gas must not completely fill the container at 130 °F.

(iv) The container must be packed in strong outside packagings.

(v) Each container must be subjected to a test performed in a hot water bath; the temperature of the bath and the duration of the test must be such that the internal pressure reaches that which would be reached at 55 °C (131 °F) (50 °C (122 °F) if the liquid phase does not exceed 95% of the capacity of the container at 50 °C (122 °F)). If the contents are sensitive to heat, the temperature of the bath must be set at between 20 °C (68 °F) and 30 °C (86 °F) but, in addition, one container in 2,000 must be tested at the higher temperature. No leakage or permanent deformation of a container may occur.

(vi) Each outside packaging must be marked "INSIDE CONTAINERS COMPLY WITH PRESCRIBED REGULATIONS."

(4) Gas samples must be transported under the following conditions:

(i) A gas sample may only be transported as non-pressurized gas when its pressure corresponding to ambient atmospheric pressure in the container is not more than 105 kPa absolute (15.22 psia).

(ii) Non-pressurized gases, toxic (or toxic and flammable) must be packed in hermetically sealed glass or metal inner packagings of not more than one L (0.3 gallons) overpacked in a strong outer packaging.

(iii) Non-pressurized gases, flammable must be packed in hermetically-sealed glass or metal inner packagings of not more than 5 L (1.3 gallons) and overpacked in a strong outer packaging.

(b) *Exceptions for foodstuffs, soap, biologicals, electronic tubes, and audible fire alarm systems.* Limited quantities of compressed gases, (except Division 2.3 gases) for which exceptions are provided as indicated by reference to this section in §172.101 of this subchapter, when in accordance with one of the following paragraphs are excepted from labeling (except when offered for transportation by air) and the specification packaging requirements of this subchapter. In addition, shipments are not subject to subpart F of part 172 of this subchapter, to part 174 of this subchapter except §174.24 and to part 177 of this subchapter, except §177.817. Special exceptions for shipment of certain compressed gases in the ORM-D class are provided in paragraph (h) of this section.

(1) Foodstuffs or soaps in a nonrefillable metal container not exceeding 1 L (61.0 cubic inches), with soluble or emulsified compressed gas, provided the pressure in the container does not exceed 140 p.s.i.g. at 130 °F. The metal container must

be capable of withstanding without bursting a pressure of one and one-half times the equilibrium pressure of the content at 130 °F.

(i) Containers must be packed in strong outside packagings.

(ii) Liquid content of the material and the gas must not completely fill the container at 130 °F.

(iii) Each outside packaging must be marked "INSIDE CONTAINERS COMPLY WITH PRESCRIBED REGULATIONS."

(2) Cream in refillable metal receptacles with soluble or emulsified compressed gas. Containers must be of such design that they will hold pressure without permanent deformation up to 375 psig and must be equipped with a device designed so as to release pressure without bursting of the container or dangerous projection of its parts at higher pressures. This exception applies to shipments offered for transportation by refrigerated motor vehicles only.

(3) Nonrefillable metal containers charged with a Division 6.1 Packing Group III or nonflammable solution containing biological products or a medical preparation which could be deteriorated by heat, and compressed gas or gases. The capacity of each container may not exceed 35 cubic inches (19.3 fluid ounces). The pressure in the container may not exceed 140 psig at 130 °F., and the liquid content of the product and gas must not completely fill the containers at 130 °F. One completed container out of each lot of 500 or less, filled for shipment, must be heated, until the pressure in the container is equivalent to equilibrium pressure of the content at 130 °F. There must be no evidence of leakage, distortion, or other defect. Container must be packed in strong outside packagings.

(4) Electronic tubes, each having a volume of not more than 30 cubic inches and charged with gas to a pressure of not more than 35 psig and packed in strong outside packagings.

(5) Audible fire alarm systems powered by a compressed gas contained in an inside metal container when shipped under the following conditions:

(i) Each inside container must have contents which are not flammable, poisonous, or corrosive as defined under this part,

(ii) Each inside container may not have a capacity exceeding 35 cubic inches (19.3 fluid ounces),

(iii) Each inside container may not have a pressure exceeding 70 psig at 70 °F. and the liquid portion of the gas may not completely fill the inside container at 130 °F., and

(iv) Each nonrefillable inside container must be designed and fabricated with a burst pressure of not less than four times its charged pressure at 130 °F. Each

refillable inside container must be designed and fabricated with a burst pressure of not less than five times its charged pressure at 130 °F.

(c)–(d) [Reserved]

(e) *Refrigerating machines.* (1) New (unused) refrigerating machines or components thereof are excepted from the specification packaging requirements of this part if they meet the following conditions. In addition, shipments are not subject to subpart F of part 172 of this subchapter, to part 174 of this subchapter except §174.24 and to part 177 of this subchapter except §177.817.

(i) Each pressure vessel may not contain more than 5,000 pounds of Group A1 refrigerant as classified in ANSI/ASHRAE Standard 15 or not more than 50 pounds of refrigerant other than Group A1.

(ii) Machines or components having two or more charged vessels may not contain an aggregate of more than 2,000 pounds of Group I refrigerant or more than 100 pounds of refrigerant other than Group I.

(iii) Each pressure vessel must be equipped with a safety device meeting the requirements of ANSI/ASHRAE 15 (IBR, see §171.7 of this subchapter).

(iv) Each pressure vessel must be equipped with a shut-off valve at each opening except openings used for safety devices and with no other connection. These valves must be closed prior to and during transportation.

(v) Pressure vessels must be manufactured, inspected and tested in accordance with ANSI/ASHRAE 15, or when over 6 inches internal diameter, in accordance with Section VIII of the ASME Code (IBR, see §171.7 of this subchapter).

(vi) All parts subject to refrigerant pressure during shipment must be tested in accordance with ANSI/ASHRAE 15.

(vii) The liquid portion of the refrigerant, if any, may not completely fill any pressure vessel at 130 °F.

(viii) The amount of refrigerant, if liquefied, may not exceed the filling density prescribed in §173.304.

(f) *Accumulators (Articles, pressurized pneumatic or hydraulic containing non-flammable gas).* The following applies to accumulators, which are hydraulic accumulators containing nonliquefied, nonflammable gas, and nonflammable liquids or pneumatic accumulators containing nonliquefied, nonflammable gas, fabricated from materials which will not fragment upon rupture.

(1) Accumulators installed in motor vehicles, construction equipment, and assembled machinery and designed and fabricated with a burst pressure of not less than five times their charged pressure at 70 °F., when shipped, are not subject to the requirements of this subchapter.

(2) Accumulators charged with limited quantities of compressed gas to not more than 200 p.s.i.g. at 70 °F. are excepted from labeling (except when offered for transportation by air) and the specification packaging requirements of this subchapter when shipped under the following conditions. In addition, shipments are not subject to subpart F of part 172 of this subchapter, to part 174 of this subchapter except §174.24 and to part 177 of this subchapter except §177.817.

(i) Each accumulator must be shipped as an inside packaging,

(ii) Each accumulator may not have a gas space exceeding 2,500 cubic inches under stored pressure, and

(iii) Each accumulator must be tested, without evidence of failure or damage, to at least three times its charged pressure of 70 °F., but not less than 120 p.s.i. before initial shipment and before each refilling and reshipment.

(3) Accumulators with a charging pressure exceeding 200 p.s.i.g. at 70 °F. are excepted from labeling (except when offered for transportation by air) and the specification packaging requirements of this subchapter when shipped under the following conditions:

(i) Each accumulator must be in compliance with the requirements stated in paragraph (f)(2), (i), (ii), and (iii) of this section, and

(ii) Each accumulator must be designed and fabricated with a burst pressure of not less than five times its charged pressure at 70 °F. when shipped.

(4) Accumulators intended to function as shock absorbers, struts, gas springs, pneumatic springs or other impact or energy-absorbing devices are not subject to the requirements of this subchapter provided each:

(i) Has a gas space capacity not exceeding 1.6 L and a charge pressure not exceeding 280 bar, where the product of the capacity expressed in liters and charge pressure expressed in bars does not exceed 80 (for example, 0.5 L gas space and 160 bar charge pressure);

(ii) Has a minimum burst pressure of 4 times the charge pressure at 20°C for products not exceeding 0.5 L gas space capacity and 5 times the charge pressure for products greater than 0.5 L gas space capacity;

(iii) Design type has been subjected to a fire test demonstrating that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, such that the article will not fragment and that the article does not rocket; and

(iv) Accumulators must be manufactured under a written quality assurance program which monitors parameters controlling burst strength, burst mode and performance in a fire situation as specified in paragraphs (f)(4)(i) through (f)(4)(iii)



of this section. A copy of the quality assurance program must be maintained at each facility at which the accumulators are manufactured.

(5) Accumulators not conforming to the provisions of paragraphs (f)(1) through (f)(4) of this section, may only be transported subject to the approval of the Associate Administrator.

(g) *Water pump system tank.* Water pump system tanks charged with compressed air or limited quantities of nitrogen to not over 40 psig for single-trip shipment to installation sites are excepted from labeling (transportation by air not authorized) and the specification packaging requirements of this subchapter when shipped under the following conditions. In addition, shipments are not subject to subpart F of this subchapter, to part 174 of this subchapter except §174.24 and part 177 except §177.817.

(1) The tank must be of steel, welded with heads concave to pressure, having a rated water capacity not exceeding 120 gallons and with outside diameter not exceeding 24 inches. Safety relief devices not required.

(2) The tank must be pneumatically tested to 100 psig. Test pressure must be permanently marked on the tank.

(3) The stress at prescribed pressure must not exceed 20,000 psi using formula:

$$S = Pd / 2t$$

where:

S = wall stress in psi:

P = prescribed pressure for the tank of at least 3 times charged pressure at 70 °F or 100 psig, whichever is greater;

d = inside diameter in inches;

t = minimum wall thickness, in inches.

(4) The burst pressure must be at least 6 times the charge pressure at 70 °F.

(5) Each tank must be overpacked in a strong outer packaging in accordance with §173.301(h).

(h) A limited quantity which conforms to the provisions of paragraph (a)(1), (a)(3), or (b) of this section and is a “consumer commodity” as defined in §171.8 of this subchapter, may be renamed “consumer commodity” and reclassified as ORM-D material. Each package may not exceed 30 kg (66 pounds) gross weight. In addition to the exceptions provided by paragraphs (a) and (b) of this section—

(1) Outside packagings are not required to be marked “INSIDE CONTAINERS COMPLY WITH PRESCRIBED REGULATIONS”;

(2) Shipments of ORM-D materials are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, a hazardous waste, or a marine pollutant or unless offered for transportation or transported by aircraft; and

(3) Shipments of ORM-D materials are eligible for the exceptions provided in §173.156.

(i) *Aerosols with a capacity of less than 50 ml.* Aerosols, as defined in §171.8 of this subchapter, with a capacity not exceeding 50 ml and with a pressure not exceeding 970 kPa (141 psig) at 55 °C (131 °F), containing no hazardous materials other than a Division 2.2 gas, are not subject to the requirements of this subchapter.

**§ 173.308 Cigarette lighter or other similar device charged with fuel.**

(a) In addition to the requirements of §173.21(i), a cigarette lighter or other similar device charged with a flammable gas must be shipped as follows:

(1) No more than 70 mL (2.3 fluid ounces) of liquefied gas may be loaded into each device;

(2) The liquid portion of the gas may not exceed 85 percent of the volumetric capacity of each fluid chamber at 15 °C (59 °F);

(3) Each device, including closures, must be capable of withstanding without leakage or rupture an internal pressure of at least two times the vapor pressure of the fuel at 55 °C (131 °F); and

(4) Devices must be overpacked in packaging that is designed or arranged to prevent moving of the device itself.

(b) When no more than 1,500 devices covered by this section are transported in one motor vehicle by highway, the requirements of subparts C through H of part 172 of this subchapter, and part 177 of this subchapter do not apply. However, no person may offer for transportation or transport the devices or prepare the devices for shipment unless that person has been specifically informed of the requirements of this section. The outer packaging, as specified in Special Provision N10 of §172.102(c)(5) of this subchapter, must be plainly and durably marked with the required proper shipping name specified in §172.101 of this subchapter, or the words “CIGARETTE LIGHTERS” and the number of devices contained in the package.

(c) For transportation by water in a closed transport vehicle or a closed freight container, the following warning must be affixed to the access doors:

**WARNING—MAY CONTAIN EXPLOSIVE MIXTURES WITH AIR—KEEP IGNITION SOURCES AWAY WHEN OPENING.**

The warning must be on a contrasting background and must be readily legible from a distance of 8 m (26 feet).

### **§ 173.320 Cryogenic liquids; exceptions**

(a) Atmospheric gases and helium, cryogenic liquids, in Dewar flasks, insulated cylinders, insulated portable tanks, insulated cargo tanks, and insulated tank cars, designed and constructed so that the pressure in such packagings will not exceed 25.3 psig under ambient temperature conditions during transportation are not subject to the requirements of this subchapter when transported by motor vehicle or railcar except as specified in paragraphs (a)(1), (a)(2), and (a)(3) of this section.

(1) Sections 171.15 and 171.16 of this subchapter pertaining to the reporting of incidents, not including a release that is the result of venting through a pressure control valve, or the neck of the Dewar flask.

(2) Subparts A, B, C, D, G and H of part 172, (§§174.24 for rail and 177.817 for highway) and in addition, part 172 in its entirety for oxygen.

(3) Subparts A and B of part 173, and §§174.1 and 177.800, 177.804, and 177.823 of this subchapter.

(b) The requirements of this subchapter do not apply to atmospheric gases and helium:

(1) During loading and unloading operations (pressure rises may exceed 25.3 psig); or

(2) When used in operation of a process system; such as a refrigeration system (pressure may exceed 25.3 psig).

(c) For transportation aboard aircraft, see the ICAO Technical Instructions (IBR, see §171.7 of this subchapter), Packing Instruction 202 and the packaging specifications in part 6, chapter 5.

### **§ 173.421 Excepted packages for limited quantities of Class 7 (radioactive) materials**

(a) A Class 7 (radioactive) material with an activity per package which does not exceed the limited quantity package limits specified in Table 4 in §173.425, and its packaging, are excepted from requirements in this subchapter for specification packaging, labeling, marking (except for the UN identification number marking requirement described in §173.422(a)), and if not a hazardous substance or hazardous waste, shipping papers, and the requirements of this subpart if:

(1) Each package meets the general design requirements of §173.410;

(2) The radiation level at any point on the external surface of the package does not exceed 0.005 mSv/hour (0.5 mrem/ hour);

(3) The nonfixed (removable) radioactive surface contamination on the external surface of the package does not exceed the limits specified in §173.443(a);

(4) The outside of the inner packaging or, if there is no inner packaging, the outside of the packaging itself bears the marking “Radioactive”;

(5) The package does not contain fissile material unless excepted by §173.453.

(6) The material is otherwise prepared for shipment as specified in accordance with §173.422.

(b) A limited quantity of Class 7 (radioactive) material that is a hazardous substance or a hazardous waste, is not subject to the provisions in §172.203(d) or §172.204(c)(4) of this subchapter.

[Amdt. 173–244, 60 FR 50307, Sept. 28, 1995, as amended at 69 FR 3675, Jan. 26, 2004; 70 FR 56098, Sept. 23, 2005]

#### **§ 173.422 Additional requirements for excepted packages containing Class 7 (radioactive) materials**

An excepted package of Class 7 (radioactive) material that is prepared for shipment under the provisions of §173.421, §173.424, §173.426, or §173.428 is not subject to any additional requirements of this subchapter, except for the following:

(a) The outside of each package must be marked with the four digit UN identification number for the material preceded by the letters UN, as shown in column (4) of the Hazardous Materials Table in §172.101 of this subchapter;

(b) Sections 171.15 and 171.16 of this subchapter, pertaining to the reporting of incidents;

(c) Sections 174.750, 175.700(b), and 176.710 of this subchapter (depending on the mode of transportation), pertaining to the reporting of decontamination;

(d) The training requirements of subpart H of part 172 of this subchapter; and

(e) For materials that meet the definition of a hazardous substance or a hazardous waste, the shipping paper requirements of subpart C of part 172 of this subchapter.

[69 FR 3675, Jan. 26, 2004]

#### **§ 173.423 Requirements for multiple hazard limited quantity Class 7 (radioactive) materials**

(a) Except as provided in §173.4, when a limited quantity radioactive material meets the definition of another hazard class or division, it must be—

(1) Classed for the additional hazard;

(2) Packaged to conform with the requirements specified in §173.421(a)(1) through (a)(5) or §173.424(a) through (g), as appropriate; and

(3) Offered for transportation in accordance with the requirements applicable to the hazard for which it is classed.

(b) A limited quantity Class 7 (radioactive) material which is classed other than Class 7 in accordance with this subchapter is excepted from the requirements of §§173.422(a), 172.203(d), and 172.204(c)(4) of this subchapter if the entry "Limited quantity radioactive material" appears on the shipping paper in association with the basic description.

#### **§ 173.424 Excepted packages for radioactive instruments and articles**

A radioactive instrument or article and its packaging are excepted from requirements in this subchapter for specification packaging, labeling, marking (except for the UN identification number marking requirement described in §173.422(a)), and if not a hazardous substance or hazardous waste, shipping papers and the requirements of this subpart if:

(a) Each package meets the general design requirements of §173.410;

(b) The activity of the instrument or article does not exceed the relevant limit listed in Table 4 in §173.425;

(c) The total activity per package does not exceed the relevant limit listed in Table 4 in §173.425;

(d) The radiation level at 10 cm (4 in) from any point on the external surface of any unpackaged instrument or article does not exceed 0.1 mSv/hour (10 mrem/hour);

(e) The active material is completely enclosed by non-active components (a device performing the sole function of containing radioactive material shall not be considered to be an instrument or manufactured article);

(f) The radiation level at any point on the external surface of a package bearing the article or instrument does not exceed 0.005 mSv/hour (0.5 mrem/hour), or, for exclusive use domestic shipments, 0.02 mSv/hour (2 mrem/hour);

(g) The nonfixed (removable) radioactive surface contamination on the external surface of the package does not exceed the limits specified in §173.443(a);

(h) Except as provided in §173.426, the package does not contain more than 15 g of uranium-235; and

(i) The package is otherwise prepared for shipment as specified in §173.422

### **§ 173.453 Fissile materials—exceptions**

Fissile materials meeting the requirements of at least one of the paragraphs (a) through (f) of this section are excepted from the requirements of this subpart for fissile materials, including the requirements of §§173.457 and 173.459, but are subject to all other requirements of this subpart, except as noted.

(a) An individual package containing 2 grams or less of fissile material.

(b) An individual or bulk packaging containing 15 grams or less of fissile material provided the package has at least 200 grams of solid nonfissile material for every gram of fissile material. Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package but must not be included in determining the required mass for solid nonfissile material.

(c) Low concentrations of solid fissile material commingled with solid nonfissile material, provide that:

(1) There is at least 2000 grams of nonfissile material for every gram of fissile material, and

(2) There is no more than 180 grams of fissile material distributed within 360 kg of contiguous nonfissile material. Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package but must not be included in determining the required mass of solid nonfissile material.

(d) Uranium enriched in uranium-235 to a maximum of 1 percent by weight, and with total plutonium and uranium-233 content of up to 1 percent of the mass of uranium-235, provided that the mass of any beryllium, graphite, and hydrogenous material enriched in deuterium constitute less than 5 percent of the uranium mass.

(e) Liquid solutions of uranyl nitrate enriched in uranium-235 to a maximum of 2 percent by mass, with a total plutonium and uranium-233 content not exceeding 0.002 percent of the mass of uranium, and with a minimum nitrogen to uranium atomic ratio (N/U) of 2. The material must be contained in at least a DOT Type A package.

(f) Packages containing, individually, a total plutonium mass of not more than 1000 grams, of which not more than 20 percent by mass may consist of plutonium-239, plutonium-241, or any combination of these radionuclides.

## FedEx Ground Guide for Shipping Hazardous Materials

### Identification Number-Cross Reference Index

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ID NO.	PROPER SHIPPING NAME	ID NO.	PROPER SHIPPING NAME
NA0027	Black powder for small arms	NA2069	Ammonium nitrate mixed fertilizers
NA0124	Jet perforating guns, charged oil well, with detonator	NA2072	Ammonium nitrate fertilizers
NA0276	Model rocket motor	NA2212	Asbestos
NA0323	Model rocket motor	NA2448	Sulfur, molten
NA0331	Ammonium nitrate–fuel oil mixture	NA2742	Isobutyl chloroformate
NA0337	Toy caps	NA2742	sec–Butyl chloroformate
NA0494	Jet perforating guns, charged oil well, with detonator	NA2810	Compounds, tree killing, liquid <i>or</i> Compounds, weed killing, liquid
NA1203	Gasohol	NA2845	Ethyl phosphonous dichloride, anhydrous
NA1270	Petroleum oil	NA2845	Methyl phosphonous dichloride
NA1325	Fusee	NA2927	Ethyl phosphonothioic dichloride, anhydrous
NA1350	Sulfur	NA2927	Ethyl phosphorodichloridate
NA1361	Charcoal	NA3077	Hazardous waste, solid, n.o.s.
NA1365	Cotton	NA3077	Other regulated substances, solid, n.o.s.
NA1556	Methyldichloroarsine	NA3082	Hazardous waste, liquid, n.o.s.
NA1613	Hydrocyanic acid, aqueous solutions	NA3082	Other regulated substances, liquid, n.o.s.
NA1693	Tear gas devices	NA3178	Smokeless powder for small arms
NA1759	Ferrous chloride, solid	NA3334	Self-defence spray, non-pressurized
NA1760	Chemical Kit	NA3356	Oxygen generator, chemical, spent
NA1760	Compounds, cleaning liquid	NA9035	Gas identification set
NA1760	Compounds, tree killing, liquid <i>or</i> Compounds, weed killing, liquid	NA9191	Chlorine dioxide, hydrate, frozen
NA1760	Ferrous chloride, solution	NA9202	Carbon monoxide, refrigerated liquid
NA1911	Diborane mixtures	NA9206	Methyl phosphonic dichloride
NA1954	Refrigerant gases, n.o.s. <i>or</i> Dispersant gases, n.o.s.	NA9260	Aluminum, molten
NA1955	Organic phosphate, mixed with compressed gas <i>or</i> Organic phosphate compound, mixed with compressed gas <i>or</i> Organic phosphorus compound, mixed with compressed gas	NA9263	Chloropivaloyl chloride
NA1961	Ethane Propane mixture, refrigerated liquid	NA9264	3,5–Dichloro–2,4,6–trifluoropyridine
NA1967	Parathion and compressed gas mixture	NA9269	Trimethoxysilane
NA1993	Combustible liquid, n.o.s.		
NA1993	Compounds, cleaning liquid		
NA1993	Compounds, tree killing, liquid <i>or</i> Compounds, weed killing liquid		
NA1993	Diesel fuel		
NA1993	Fuel oil		
NA1999	Asphalt		

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UN0004 Ammonium picrate	UN0072 Cyclotrimethylenetrinitramine, wetted or Cyclonite, wetted <i>or</i> Hexogen, wetted <i>or</i> RDX, wetted
UN0005 Cartridges for weapons	UN0073 Detonators for ammunition
UN0006 Cartridges for weapons	UN0074 Diazodinitrophenol, wetted
UN0007 Cartridges for weapons	UN0075 Diethyleneglycol dinitrate, desensitized
UN0009 Ammunition, incendiary	UN0076 Dinitrophenol
UN0010 Ammunition, incendiary	UN0077 Dinitrophenolates
UN0012 Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms	UN0078 Dinitroresorcinol
UN0014 Cartridges for weapons, blank <i>or</i> Cartridges, small arms blank	UN0079 Hexanitrodiphenylamine <i>or</i> Dipicrylamine <i>or</i> Hexyl
UN0015 Ammunition, smoke	UN0081 Explosive, blasting, type A
UN0016 Ammunition, smoke	UN0082 Explosive, blasting, type B
UN0018 Ammunition, tear-producing	UN0083 Explosive, blasting, type C
UN0019 Ammunition, tear-producing	UN0084 Explosive, blasting, type D
UN0020 Ammunition, toxic	UN0092 Flares, surface
UN0021 Ammunition, toxic	UN0093 Flares, aerial
UN0027 Black powder <i>or</i> Gunpowder	UN0094 Flash powder
UN0028 Black powder, compressed <i>or</i> Gunpowder, compressed <i>or</i> Black powder, in pellets <i>or</i> Gunpowder, in pellets	UN0099 Fracturing devices, explosive
UN0029 Detonators, non-electric	UN0101 Fuse, non-detonating
UN0030 Detonators, electric	UN0102 Cord detonating <i>or</i> Fuse detonating
UN0033 Bombs	UN0103 Fuse, igniter
UN0034 Bombs	UN0104 Cord, detonating, mild effect <i>or</i> Fuse, detonating, mild effect
UN0035 Bombs	UN0105 Fuse, safety
UN0037 Bombs, photo-flash	UN0106 Fuzes, detonating
UN0038 Bombs, photo-flash	UN0107 Fuzes, detonating
UN0039 Bombs, photo-flash	UN0110 Grenades, practice
UN0042 Boosters	UN0113 Guanyl nitrosaminoguanlylidene hydrazine, wetted
UN0043 Bursters	UN0114 Guanyl nitrosaminoguanlylidene hydrazine, wetted <i>or</i> Tetrazene, wetted
UN0044 Primers, cap type	UN0118 Hexolite, <i>or</i> Hexotol
UN0048 Charges, demolition	UN0121 Igniters
UN0049 Cartridges, flash	UN0124 Jet perforating guns, charged
UN0050 Cartridges, flash	UN0129 Lead azide, wetted
UN0054 Cartridges, signal	UN0130 Lead styphnate, wetted <i>or</i> Lead trinitroresorcinate, wetted
UN0055 Cases, cartridge, empty with primer	UN0131 Lighters, fuse
UN0056 Charges, depth	UN0132 Deflagrating metal salts of aromatic nitroderivatives, n.o.s
UN0059 Charges, shaped	UN0133 Mannitol hexanitrate, wetted <i>or</i> Nitromannite, wetted
UN0060 Charges, supplementary explosive	UN0135 Mercury fulminate, wetted
UN0065 Cord, detonating	
UN0066 Cord, igniter	
UN0070 Cutters, cable, explosive	



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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN0136 Mines	UN0213 Trinitroanisole
UN0137 Mines	UN0214 Trinitrobenzene
UN0138 Mines	UN0215 Trinitrobenzoic acid
UN0143 Nitroglycerin, desensitized	UN0216 Trinitro-meta-cresol
UN0144 Nitroglycerin, solution in alcohol	UN0217 Trinitronaphthalene
UN0146 Nitrostarch	UN0218 Trinitrophenetole
UN0147 Nitro urea	UN0219 Trinitroresorcinol <i>or</i> Styphnic acid
UN0150 Pentaerythrite tetranitrate, wetted <i>or</i> Pentaerythritol tetranitrate, wetted, <i>or</i> PETN, wetted <i>or</i> Pentaerythrite tetranitrate, <i>or</i> Pentaerythritol tetranitrate <i>or</i> PETN, desensitized	UN0220 Urea nitrate
UN0151 Pentolite	UN0221 Warheads, torpedo
UN0153 Trinitroaniline <i>or</i> Picramide	UN0222 Ammonium nitrate
UN0154 Trinitrophenol <i>or</i> Picric acid	UN0224 Barium azide
UN0155 Trinitrochlorobenzene <i>or</i> Picryl chloride	UN0225 Boosters with detonator
UN0159 Powder cake, wetted <i>or</i> Powder paste, wetted	UN0226 Cyclotetramethylenetetranitramine, wetted <i>or</i> HMX, wetted <i>or</i> Octogen, wetted
UN0160 Powder, smokeless	UN0234 Sodium dinitro-o-cresolate
UN0161 Powder, smokeless	UN0235 Sodium picramate
UN0167 Projectiles	UN0236 Zirconium picramate
UN0168 Projectiles	UN0237 Charges, shaped, flexible, linear
UN0169 Projectiles	UN0238 Rockets, line-throwing
UN0171 Ammunition, illuminating	UN0240 Rockets, line-throwing
UN0173 Release devices, explosive	UN0241 Explosive, blasting, type E
UN0174 Rivets, explosive	UN0242 Charges, propelling, for cannon
UN0180 Rockets	UN0243 Ammunition, incendiary, white phosphorus
UN0181 Rockets	UN0244 Ammunition, incendiary, white phosphorus
UN0182 Rockets	UN0245 Ammunition smoke, white phosphorus
UN0183 Rockets	UN0246 Ammunition smoke, white phosphorus
UN0186 Rocket motors	UN0247 Ammunition, incendiary
UN0190 Samples, explosive	UN0248 Contrivances, water-activated
UN0191 Signal devices, hand	UN0249 Contrivances, water-activated
UN0192 Signals, railway track, explosive	UN0250 Rocket motors with hypergolic liquids
UN0193 Signals, railway track, explosive	UN0254 Ammunition, illuminating
UN0194 Signals, distress	UN0255 Detonators, electric
UN0195 Signals, distress	UN0257 Fuzes, detonating
UN0196 Signals, smoke	UN0266 Octolite <i>or</i> Octol
UN0197 Signals, smoke	UN0267 Detonators, non-electric
UN0204 Sounding devices, explosive	UN0268 Boosters with detonator
UN0207 Tetranitroaniline	UN0271 Charges, propelling
UN0208 Trinitrophenylmethylnitramine <i>or</i> Tetryl	UN0272 Charges, propelling
UN0209 Trinitrotoluene <i>or</i> TNT	UN0275 Cartridges, power device
UN0212 Tracers for ammunition	UN0276 Cartridges, power device
	UN0277 Cartridges, oil well
	UN0278 Cartridges, oil well
	UN0279 Charges, propelling, for cannon
	UN0280 Rocket motors

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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN0281 Rocket motors	UN0331 Explosive, blasting, type B <i>or</i> Agent blasting, Type B
UN0282 Nitroguanidine <i>or</i> Picrite	UN0332 Explosive, blasting, type E <i>or</i> Agent blasting, Type E
UN0283 Boosters	UN0333 Fireworks
UN0284 Grenades	UN0334 Fireworks
UN0285 Grenades	UN0335 Fireworks
UN0286 Warheads, rocket	UN0336 Fireworks
UN0287 Warheads, rocket	UN0337 Fireworks
UN0288 Charges, shaped, flexible, linear	UN0338 Cartridges for weapons, blank <i>or</i> Cartridges, small arms blank
UN0289 Cord, detonating	UN0339 Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms
UN0290 Cord detonating <i>or</i> Fuse detonating	UN0340 Nitrocellulose
UN0291 Bombs	UN0341 Nitrocellulose
UN0292 Grenades	UN0342 Nitrocellulose, wetted
UN0293 Grenades	UN0343 Nitrocellulose, plasticized
UN0294 Mines	UN0344 Projectiles
UN0295 Rockets	UN0345 Projectiles
UN0296 Sounding devices, explosive	UN0346 Projectiles
UN0297 Ammunition, illuminating	UN0347 Projectiles
UN0299 Bombs, photo-flash	UN0348 Cartridges for weapons
UN0300 Ammunition, incendiary	UN0349 Articles, explosive, n.o.s.
UN0301 Ammunition, tear-producing	UN0350 Articles, explosive, n.o.s.
UN0303 Ammunition, smoke	UN0351 Articles, explosive, n.o.s.
UN0305 Flash powder	UN0352 Articles, explosive, n.o.s.
UN0306 Tracers for ammunition	UN0353 Articles, explosive, n.o.s.
UN0312 Cartridges, signal	UN0354 Articles, explosive, n.o.s.
UN0313 Signals, smoke	UN0355 Articles, explosive, n.o.s.
UN0314 Igniters	UN0356 Articles, explosive, n.o.s.
UN0315 Igniters	UN0357 Substances, explosive, n.o.s.
UN0316 Fuzes, igniting	UN0358 Substances, explosive, n.o.s.
UN0317 Fuzes, igniting	UN0359 Substances, explosive, n.o.s.
UN0318 Grenades, practice	UN0360 Detonator assemblies, non-electric
UN0319 Primers, tubular	UN0361 Detonator assemblies, non-electric
UN0320 Primers, tubular	UN0362 Ammunition, practice
UN0321 Cartridges for weapons	UN0363 Ammunition, proof
UN0322 Rocket motors with hypergolic liquids	UN0364 Detonators for ammunition
UN0323 Cartridges, power device	UN0365 Detonators for ammunition
UN0324 Projectiles	UN0366 Detonators for ammunition
UN0325 Igniters	UN0367 Fuzes, detonating
UN0326 Cartridges for weapons, blank	UN0368 Fuzes, igniting
UN0327 Cartridges for weapons, blank <i>or</i> Cartridges, small arms blank	UN0369 Warheads, rocket
UN0328 Cartridges for weapons, inert projectile	UN0370 Warheads, rocket
UN0329 Torpedoes	
UN0330 Torpedoes	

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UN0371 Warheads, rocket	UN0406 Dinitrosobenzene
UN0372 Grenades, practice	UN0407 Tetrazol-1-acetic acid
UN0373 Signal devices, hand	UN0408 Fuzes, detonating
UN0374 Sounding devices, explosive	UN0409 Fuzes, detonating
UN0375 Sounding devices, explosive	UN0410 Fuzes, detonating
UN0376 Primers, tubular	UN0411 Pentaerythrite tetranitrate <i>or</i> Pentaerythritol tetranitrate <i>or</i> PETN
UN0377 Primers, cap type	UN0412 Cartridges for weapons
UN0378 Primers, cap type	UN0413 Cartridges for weapons, blank
UN0379 Cases, cartridges, empty with primer	UN0414 Charges, propelling, for cannon
UN0380 Articles, pyrophoric	UN0415 Charges, propelling
UN0381 Cartridges, power device	UN0417 Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms
UN0382 Components, explosive train, n.o.s.	UN0418 Flares, surface
UN0383 Components, explosive train, n.o.s.	UN0419 Flares, surface
UN0384 Components, explosive train, n.o.s.	UN0420 Flares, aerial
UN0385 5-Nitrobenzotriazol	UN0421 Flares, aerial
UN0386 Trinitrobenzenesulfonic acid	UN0424 Projectiles
UN0387 Trinitrofluorenone	UN0425 Projectiles
UN0388 Trinitrotoluene and Trinitrobenzene mixtures <i>or</i> TNT and trinitrobenzene mixtures <i>or</i> TNT and hexanitrostilbene mixtures <i>or</i> Trinitrotoluene and hexanitrostilbene mixtures	UN0426 Projectiles
UN0389 Trinitrotoluene mixtures containing Trinitrobenzene and Hexanitrostilbene <i>or</i> TNT mixtures containing trinitrobenzene and hexanitrostilbene	UN0427 Projectiles
UN0390 Tritonal	UN0428 Articles, pyrotechnic
UN0391 RDX and HMX mixtures, wetted <i>or</i> RDX and HMX mixtures, desensitized	UN0429 Articles, pyrotechnic
UN0392 Hexanitrostilbene	UN0430 Articles, pyrotechnic
UN0393 Hexotonal	UN0431 Articles, pyrotechnic
UN0394 Trinitroresorcinol, wetted <i>or</i> Styphnic acid	UN0432 Articles, pyrotechnic
UN0395 Rocket motors, liquid fueled	UN0433 Powder cake, wetted <i>or</i> Powder paste, wetted
UN0396 Rocket motors, liquid fueled	UN0434 Projectiles
UN0397 Rockets, liquid fueled	UN0435 Projectiles
UN0398 Rockets, liquid fueled	UN0436 Rockets
UN0399 Bombs with flammable liquid	UN0437 Rockets
UN0400 Bombs with flammable liquid	UN0438 Rockets
UN0401 Dipicryl sulfide	UN0439 Charges, shaped
UN0402 Ammonium perchlorate	UN0440 Charges, shaped
UN0403 Flares, aerial	UN0441 Charges, shaped
UN0404 Flares, aerial	UN0442 Charges, explosive, commercial
UN0405 Cartridges, signal	UN0443 Charges, explosive, commercial
	UN0444 Charges, explosive, commercial
	UN0445 Charges, explosive, commercial
	UN0446 Cases, combustible, empty, without primer
	UN0447 Cases, combustible, empty, without primer
	UN0448 5-Mercaptotetrazol-1-acetic acid
	UN0449 Torpedoes, liquid fueled
	UN0450 Torpedoes, liquid fueled

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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN0451 Torpedoes	UN0489 Dinitroglycoluril <i>or</i> Dingu
UN0452 Grenades, practice	UN0490 Nitrotriazolone <i>or</i> NTO
UN0453 Rockets, line-throwing	UN0491 Charges, propelling
UN0454 Igniters	UN0492 Signals, railway track, explosive
UN0455 Detonators, non-electric	UN0493 Signals, railway track, explosive
UN0456 Detonators, electric	UN0494 Jet perforating guns, charged
UN0457 Charges, bursting, plastics bonded	UN0495 Propellant, liquid
UN0458 Charges, bursting, plastics bonded	UN0496 Octonal
UN0459 Charges, bursting, plastics bonded	UN0497 Propellant, liquid
UN0460 Charges, bursting, plastics bonded	UN0498 Propellant, solid
UN0461 Components, explosive train, n.o.s.	UN0499 Propellant, solid
UN0462 Articles, explosive, n.o.s.	UN0500 Detonator assemblies, non-electric
UN0463 Articles, explosive, n.o.s.	UN0501 Propellant, solid
UN0464 Articles, explosive, n.o.s.	UN0502 Rockets
UN0465 Articles, explosive, n.o.s.	UN0503 Air bag inflators <i>or</i> Air bag modules <i>or</i> Seat-belt pretensioner
UN0466 Articles, explosive, n.o.s.	UN0504 1H-Tetrazole
UN0467 Articles, explosive, n.o.s.	UN1001 Acetylene, dissolved
UN0468 Articles, explosive, n.o.s.	UN1002 Air, compressed
UN0469 Articles, explosive, n.o.s.	UN1003 Air, refrigerated liquid
UN0470 Articles, explosive, n.o.s.	UN1003 Air, refrigerated liquid
UN0471 Articles, explosive, n.o.s.	UN1005 Ammonia, anhydrous
UN0472 Articles, explosive, n.o.s.	UN1006 Argon, compressed
UN0473 Substances, explosive, n.o.s.	UN1008 Boron trifluoride, compressed
UN0474 Substances, explosive, n.o.s.	UN1009 Bromotrifluoromethane <i>or</i> Refrigerant gas, R 13B1
UN0475 Substances, explosive, n.o.s.	UN1010 Butadienes, stabilized
UN0476 Substances, explosive, n.o.s.	UN1011 Butane
UN0477 Substances, explosive, n.o.s.	UN1012 Butylene
UN0478 Substances, explosive, n.o.s.	UN1013 Carbon dioxide
UN0479 Substances, explosive, n.o.s.	UN1014 Carbon dioxide and oxygen mixtures, compressed
UN0480 Substances, explosive, n.o.s.	UN1015 Carbon dioxide and nitrous oxide mixtures
UN0481 Substances, explosive, n.o.s.	UN1016 Carbon monoxide, compressed
UN0482 Substances, explosive, very insensitive, n.o.s. <i>or</i> Substances, EVI n.o.s.	UN1017 Chlorine
UN0483 Cyclotrimethylenetrinitramine, desensitized <i>or</i> Cyclonite, desensitized <i>or</i> Hexogen, desensitized <i>or</i> RDX, desensitized	UN1018 Chlorodifluoromethane <i>or</i> Refrigerant gas R 22
UN0484 Cyclotetramethylenetetranitramine, desensitized <i>or</i> Octogen, desensitized <i>or</i> HMX, desensitized	UN1020 Chloropentafluoroethane <i>or</i> Refrigerant gas R 115
UN0485 Substances, explosive, n.o.s.	UN1021 1-Chloro-1,2,2,2-tetrafluoroethane <i>or</i> Refrigerant gas R 124
UN0486 Articles, explosive, extremely insensitive <i>or</i> Articles, EEI	UN1022 Chlorotrifluoromethane <i>or</i> Refrigerant gas R 13
UN0487 Signals, smoke	UN1023 Coal gas, compressed
UN0488 Ammunition, practice	

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UN1026 Cyanogen	UN1071 Oil gas, compressed
UN1027 Cyclopropane	UN1072 Oxygen, compressed
UN1028 Dichlorodifluoromethane <i>or</i> Refrigerant gas R 12	UN1073 Oxygen, refrigerated liquid
UN1029 Dichlorofluoromethane <i>or</i> Refrigerant gas R21	UN1075 Petroleum gases, liquefied <i>or</i> Liquefied petroleum gas
UN1030 1,1-Difluoroethane <i>or</i> Refrigerant gas R 152a	UN1076 Phosgene
UN1032 Dimethylamine, anhydrous	UN1077 Propylene
UN1033 Dimethyl ether	UN1078 Refrigerant gases, n.o.s.
UN1035 Ethane	UN1079 Sulfur dioxide
UN1036 Ethylamine	UN1080 Sulfur hexafluoride
UN1037 Ethyl chloride	UN1081 Tetrafluoroethylene, stabilized
UN1038 Ethylene, refrigerated liquid	UN1082 Trifluorochloroethylene, stabilized
UN1039 Ethyl methyl ether	UN1083 Trimethylamine, anhydrous
UN1040 Ethylene oxide <i>or</i> Ethylene oxide with nitrogen	UN1085 Vinyl bromide, stabilized
UN1041 Ethylene oxide and carbon dioxide mixtures	UN1086 Vinyl chloride, stabilized
UN1043 Fertilizer ammoniating solution	UN1087 Vinyl methyl ether, stabilized
UN1044 Fire extinguishers	UN1088 Acetal
UN1045 Fluorine, compressed	UN1089 Acetaldehyde
UN1046 Helium, compressed	UN1090 Acetone
UN1048 Hydrogen bromide, anhydrous	UN1091 Acetone oils
UN1049 Hydrogen, compressed	UN1092 Acrolein, stabilized
UN1050 Hydrogen chloride, anhydrous	UN1093 Acrylonitrile, stabilized
UN1051 Hydrogen cyanide, stabilized	UN1098 Allyl alcohol
UN1052 Hydrogen fluoride, anhydrous	UN1099 Allyl bromide
UN1053 Hydrogen sulfide	UN1100 Allyl chloride
UN1055 Isobutylene	UN1104 Amyl acetates
UN1056 Krypton, compressed	UN1105 Pentanols
UN1057 Lighters <i>or</i> Lighter refills	UN1106 Amylamines
UN1058 Liquefied gases	UN1107 Amyl chlorides
UN1060 Methyl acetylene and propadiene mixtures, stabilized	UN1108 1-Pentene
UN1061 Methylamine, anhydrous	UN1109 Amyl formates
UN1062 Methyl bromide	UN1110 n-Amyl methyl ketone
UN1063 Methyl chloride <i>or</i> Refrigerant gas R 40	UN1111 Amyl mercaptans
UN1064 Methyl mercaptan	UN1112 Amyl nitrate
UN1065 Neon, compressed	UN1113 Amyl nitrites
UN1066 Nitrogen, compressed	UN1114 Benzene
UN1067 Dinitrogen tetroxide	UN1120 Butanols
UN1069 Nitrosyl chloride	UN1123 Butyl acetates
UN1070 Nitrous oxide	UN1125 n-Butylamine
	UN1126 1-Bromobutane
	UN1127 Chlorobutanes
	UN1128 n-Butyl formate
	UN1129 Butyraldehyde
	UN1130 Camphor oil

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UN1131 Carbon disulfide	UN1183 Ethyldichlorosilane
UN1133 Adhesives	UN1184 Ethylene dichloride
UN1134 Chlorobenzene	UN1185 Ethyleneimine, stabilized
UN1135 Ethylene chlorohydrin	UN1188 Ethylene glycol monomethyl ether
UN1136 Coal tar distillates, flammable	UN1189 Ethylene glycol monomethyl ether acetate
UN1139 Coating solution	UN1190 Ethyl formate
UN1143 Crotonaldehyde, stabilized	UN1191 Octyl aldehydes
UN1144 Crotonylene	UN1192 Ethyl lactate
UN1145 Cyclohexane	UN1193 Ethyl methyl ketone <i>or</i> Methyl ethyl ketone
UN1146 Cyclopentane	UN1194 Ethyl nitrite solutions
UN1147 Decahydronaphthalene	UN1195 Ethyl propionate
UN1148 Diacetone alcohol	UN1196 Ethyltrichlorosilane
UN1149 Dibutyl ethers	UN1197 Extracts, flavoring, liquid
UN1150 1,2-Dichloroethylene	UN1198 Formaldehyde, solutions, flammable
UN1152 Dichloropentanes	UN1199 Furaldehydes
UN1153 Ethylene glycol diethyl ether	UN1201 Fusel oil
UN1154 Diethylamine	UN1202 Diesel fuel
UN1155 Diethyl ether <i>or</i> Ethyl ether	UN1202 Gas oil
UN1156 Diethyl ketone	UN1202 Heating oil, light
UN1157 Diisobutyl ketone	UN1203 Gasoline
UN1158 Diisopropylamine	UN1204 Nitroglycerin solution in alcohol
UN1159 Diisopropyl ether	UN1206 Heptanes
UN1160 Dimethylamine solution	UN1207 Hexaldehyde
UN1161 Dimethyl carbonate	UN1208 Hexanes
UN1162 Dimethyldichlorosilane	UN1210 Printing ink <i>or</i> Printing ink related material
UN1163 Dimethylhydrazine, unsymmetrical	UN1212 Isobutanol <i>or</i> Isobutyl alcohol
UN1164 Dimethyl sulfide	UN1213 Isobutyl acetate
UN1165 Dioxane	UN1214 Isobutylamine
UN1166 Dioxolane	UN1216 Isooctenes
UN1167 Divinyl ether, stabilized	UN1218 Isoprene, stabilized
UN1169 Extracts, aromatic, liquid	UN1219 Isopropanol <i>or</i> Isopropyl alcohol
UN1170 Ethanol <i>or</i> Ethyl alcohol <i>or</i> Ethanol solutions <i>or</i> Ethyl alcohol solutions	UN1220 Isopropyl acetate
UN1171 Ethylene glycol monoethyl ether	UN1221 Isopropylamine
UN1172 Ethylene glycol monoethyl ether acetate	UN1222 Isopropyl nitrate
UN1173 Ethyl acetate	UN1223 Kerosene
UN1175 Ethylbenzene	UN1224 Ketones, liquid, n.o.s.
UN1176 Ethyl borate	UN1228 Mercaptans, liquid, flammable, toxic, n.o.s. <i>or</i> Mercaptan mixtures, liquid, flammable, toxic, n.o.s.
UN1177 2-Ethylbutyl acetate	
UN1178 2-Ethylbutyraldehyde	UN1229 Mesityl oxide
UN1179 Ethyl butyl ether	UN1230 Methanol
UN1180 Ethyl butyrate	UN1231 Methyl acetate
UN1181 Ethyl chloroacetate	UN1233 Methylamyl acetate
UN1182 Ethyl chloroformate	UN1234 Methylal

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN1235 Methylamine, aqueous solution	UN1297 Trimethylamine, aqueous solutions
UN1237 Methyl butyrate	UN1298 Trimethylchlorosilane
UN1238 Methyl chloroformate	UN1299 Turpentine
UN1239 Methyl chloromethyl ether	UN1300 Turpentine substitute
UN1242 Methylchlorosilane	UN1301 Vinyl acetate, stabilized
UN1243 Methyl formate	UN1302 Vinyl ethyl ether, stabilized
UN1244 Methylhydrazine	UN1303 Vinylidene chloride, stabilized
UN1245 Methyl isobutyl ketone	UN1304 Vinyl isobutyl ether, stabilized
UN1246 Methyl isopropenyl ketone, stabilized	UN1305 Vinyltrichlorosilane, stabilized
UN1247 Methyl methacrylate monomer, stabilized	UN1306 Wood preservatives, liquid
UN1248 Methyl propionate	UN1307 Xylenes
UN1249 Methyl propyl ketone	UN1308 Zirconium suspended in a liquid
UN1250 Methyltrichlorosilane	UN1309 Aluminum powder, coated
UN1251 Methyl vinyl ketone, stabilized	UN1310 Ammonium picrate, wetted
UN1259 Nickel carbonyl	UN1312 Borneol
UN1261 Nitromethane	UN1313 Calcium resinate
UN1262 Octanes	UN1314 Calcium resinate, fused
UN1263 Paint	UN1318 Cobalt resinate, precipitated
UN1263 Paint related material	UN1320 Dinitrophenol, wetted
UN1264 Paraldehyde	UN1321 Dinitrophenolates, wetted
UN1265 Pentanes	UN1322 Dinitroresorcinol, wetted
UN1266 Perfumery products	UN1323 Ferrocium
UN1267 Petroleum crude oil	UN1324 Films, nitrocellulose base
UN1268 Petroleum distillates, n.o.s. <i>or</i> Petroleum products, n.o.s.	UN1325 Flammable solids, organic, n.o.s.
UN1272 Pine oil	UN1326 Hafnium powder, wetted
UN1274 n-Propanol <i>or</i> Propyl alcohol, normal	UN1328 Hexamethylenetetramine
UN1275 Propionaldehyde	UN1330 Manganese resinate
UN1276 n-Propyl acetate	UN1331 Matches, strike anywhere
UN1277 Propylamine	UN1332 Metaldehyde
UN1278 1-Chloropropane	UN1333 Cerium
UN1279 1,2-Dichloropropane	UN1334 Naphthalene, crude <i>or</i> Naphthalene
UN1280 Propylene oxide	UN1336 Nitroguanidine, wetted <i>or</i> Picrite, wetted
UN1281 Propyl formates	UN1337 Nitrostarch, wetted
UN1282 Pyridine	UN1338 Phosphorus, amorphous
UN1286 Rosin oil	UN1339 Phosphorus heptasulfide
UN1287 Rubber solution	UN1340 Phosphorus pentasulfide
UN1288 Shale oil	UN1341 Phosphorus sesquisulfide
UN1289 Sodium methylate solutions	UN1343 Phosphorus trisulfide
UN1292 Tetraethyl silicate	UN1344 Trinitrophenol, wetted
UN1293 Tinctures, medicinal	UN1345 Rubber scrap <i>or</i> Shoddy
UN1294 Toluene	UN1346 Silicon powder, amorphous
UN1295 Trichlorosilane	UN1347 Silver picrate, wetted
UN1296 Triethylamine	UN1348 Sodium dinitro- <i>o</i> -cresolate, wetted
	UN1349 Sodium picramate, wetted

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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN1350 Sulfur	UN1391 Alkali metal dispersions, <i>or</i> Alkaline earth metal dispersions
UN1352 Titanium powder, wetted	UN1392 Alkaline earth metal amalgams, liquid
UN1353 Fibers <i>or</i> Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s.	UN1393 Alkaline earth metal alloys, n.o.s.
UN1354 Trinitrobenzene, wetted	UN1394 Aluminum carbide
UN1355 Trinitrobenzoic acid, wetted	UN1395 Aluminum ferrosilicon powder
UN1356 Trinitrotoluene, wetted	UN1396 Aluminum powder, uncoated
UN1357 Urea nitrate, wetted	UN1397 Aluminum phosphide
UN1358 Zirconium powder, wetted	UN1398 Aluminum silicon powder, uncoated
UN1360 Calcium phosphide	UN1400 Barium
UN1361 Carbon	UN1401 Calcium
UN1362 Carbon, activated	UN1402 Calcium carbide
UN1363 Copra	UN1403 Calcium cyanamide
UN1364 Cotton waste, oily	UN1404 Calcium hydride
UN1365 Cotton, wet	UN1405 Calcium silicide
UN1366 Diethylzinc	UN1407 Cesium <i>or</i> Caesium
UN1369 p-Nitrosodimethylaniline	UN1408 Ferrosilicon
UN1370 Dimethylzinc	UN1409 Metal hydrides, water reactive, n.o.s.
UN1372 Fibers, animal <i>or</i> Fibers, vegetable	UN1410 Lithium aluminum hydride
UN1373 Fibers <i>or</i> Fabrics, animal <i>or</i> vegetable <i>or</i> Synthetic, n.o.s.	UN1411 Lithium aluminum hydride, ethereal
UN1374 Fish meal, unstabilized <i>or</i> Fish scrap, unstabilized	UN1413 Lithium borohydride
UN1376 Iron oxide, spent, <i>or</i> Iron sponge, spent	UN1414 Lithium hydride
UN1378 Metal catalyst, wetted	UN1415 Lithium
UN1379 Paper, unsaturated oil treated	UN1417 Lithium silicon
UN1380 Pentaborane	UN1418 Magnesium, powder <i>or</i> Magnesium alloys, powder
UN1381 Phosphorus, white dry <i>or</i> Phosphorus, white, under water <i>or</i> Phosphorus white, solution <i>or</i> Phosphorus, yellow dry <i>or</i> Phosphorus, yellow, under water <i>or</i> Phosphorus, yellow, in solution	UN1419 Magnesium aluminum phosphide
UN1382 Potassium sulfide, anhydrous <i>or</i> Potassium sulfide	UN1420 Potassium, metal alloys, liquid
UN1383 Pyrophoric metals, n.o.s. <i>or</i> Pyrophoric alloys, n.o.s.	UN1421 Alkali metal alloys, liquid, n.o.s.
UN1384 Sodium dithionite <i>or</i> Sodium hydrosulfite	UN1422 Potassium sodium alloys, liquid
UN1385 Sodium sulfide, anhydrous <i>or</i> Sodium sulfide	UN1423 Rubidium
UN1386 Seed cake	UN1426 Sodium borohydride
UN1387 Wool waste, wet	UN1427 Sodium hydride
UN1389 Alkali metal amalgam, liquid	UN1428 Sodium
UN1390 Alkali metal amides	UN1431 Sodium methylate
	UN1432 Sodium phosphide
	UN1433 Stannic phosphide
	UN1435 Zinc ashes
	UN1436 Zinc powder <i>or</i> Zinc dust
	UN1437 Zirconium hydride
	UN1438 Aluminum nitrate
	UN1439 Ammonium dichromate
	UN1442 Ammonium perchlorate
	UN1444 Ammonium persulfate



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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN1445 Barium chlorate, solid	UN1491 Potassium peroxide
UN1446 Barium nitrate	UN1492 Potassium persulfate
UN1447 Barium perchlorate, solid	UN1493 Silver nitrate
UN1448 Barium permanganate	UN1494 Sodium bromate
UN1449 Barium peroxide	UN1495 Sodium chlorate
UN1450 Bromates, inorganic, n.o.s.	UN1496 Sodium chlorite
UN1451 Cesium nitrate <i>or</i> Caesium nitrate	UN1498 Sodium nitrate
UN1452 Calcium chlorate	UN1499 Sodium nitrate and potassium nitrate mixtures
UN1453 Calcium chlorite	
UN1454 Calcium nitrate	UN1500 Sodium nitrite
UN1455 Calcium perchlorate	UN1502 Sodium perchlorate
UN1456 Calcium permanganate	UN1503 Sodium permanganate
UN1457 Calcium peroxide	UN1504 Sodium peroxide
UN1458 Chlorate and borate mixtures	UN1505 Sodium persulfate
UN1459 Chlorate and magnesium chloride mixtures, solid	UN1506 Strontium chlorate
	UN1507 Strontium nitrate
UN1461 Chlorates, inorganic, n.o.s.	UN1508 Strontium perchlorate
UN1462 Chlorites, inorganic, n.o.s.	UN1509 Strontium peroxide
UN1463 Chromium trioxide, anhydrous	UN1510 Tetranitromethane
UN1465 Didymium nitrate	UN1511 Urea hydrogen peroxide
UN1466 Ferric nitrate	UN1512 Zinc ammonium nitrite
UN1467 Guanidine nitrate	UN1513 Zinc chlorate
UN1469 Lead nitrate	UN1514 Zinc nitrate
UN1470 Lead perchlorate, solid	UN1515 Zinc permanganate
UN1471 Lithium hypochlorite, dry <i>or</i> Lithium hypochlorite mixtures, dry	UN1516 Zinc peroxide
	UN1517 Zirconium picramate, wetted
UN1472 Lithium peroxide	UN1541 Acetone cyanohydrin, stabilized
UN1473 Magnesium bromate	UN1544 Alkaloids, solid, n.o.s. <i>or</i> Alkaloid salts, solid, n.o.s.
UN1474 Magnesium nitrate	
UN1475 Magnesium perchlorate	UN1545 Allyl isothiocyanate, stabilized
UN1476 Magnesium peroxide	UN1546 Ammonium arsenate
UN1477 Nitrates, inorganic, n.o.s.	UN1547 Aniline
UN1479 Oxidizing solid, n.o.s.	UN1548 Aniline hydrochloride
UN1481 Perchlorates, inorganic, n.o.s.	UN1549 Antimony compounds, inorganic, solid, n.o.s.
UN1482 Permanganates, inorganic, n.o.s.	
UN1483 Peroxides, inorganic, n.o.s.	UN1550 Antimony lactate
UN1484 Potassium bromate	UN1551 Antimony potassium tartrate
UN1485 Potassium chlorate	UN1553 Arsenic acid, liquid
UN1486 Potassium nitrate	UN1554 Arsenic acid, solid
UN1487 Potassium nitrate and sodium nitrite mixtures	UN1555 Arsenic bromide
UN1488 Potassium nitrite	UN1556 Arsenic compounds, liquid, n.o.s.
UN1489 Potassium perchlorate	UN1557 Arsenic compounds, solid, n.o.s.
UN1490 Potassium permanganate	UN1558 Arsenic
	UN1559 Arsenic pentoxide

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN1560 Arsenic trichloride	UN1606 Ferric arsenate
UN1561 Arsenic trioxide	UN1607 Ferric arsenite
UN1562 Arsenical dust	UN1608 Ferrous arsenate
UN1564 Barium compounds, n.o.s.	UN1611 Hexaethyl tetraphosphate
UN1565 Barium cyanide	UN1612 Hexaethyl tetraphosphate and compressed gas mixtures
UN1566 Beryllium compounds, n.o.s.	UN1613 Hydrocyanic acid, aqueous solutions <i>or</i> hydrogen cyanide, aqueous solutions
UN1567 Beryllium, powder	UN1614 Hydrogen cyanide, stabilized
UN1569 Bromoacetone	UN1616 Lead acetate
UN1570 Brucine	UN1617 Lead arsenates
UN1571 Barium azide, wetted	UN1618 Lead arsenites
UN1572 Cacodylic acid	UN1620 Lead cyanide
UN1573 Calcium arsenate	UN1621 London purple
UN1574 Calcium arsenate and calcium arsenite, mixtures, solid	UN1622 Magnesium arsenate
UN1575 Calcium cyanide	UN1623 Mercuric arsenate
UN1577 Chlorodinitrobenzenes, liquid	UN1624 Mercuric chloride
UN1578 Chloronitrobenzene, solid	UN1625 Mercuric nitrate
UN1579 4-Chloro- <i>o</i> -toluidine hydrochloride, solid	UN1626 Mercuric potassium cyanide
UN1580 Chloropicrin	UN1627 Mercurous nitrate
UN1581 Chloropicrin and methyl bromide mixtures	UN1629 Mercury acetate
UN1582 Chloropicrin and methyl chloride mixtures	UN1630 Mercury ammonium chloride
UN1583 Chloropicrin mixtures, n.o.s.	UN1631 Mercury benzoate
UN1585 Copper acetoarsenite	UN1634 Mercury bromides
UN1586 Copper arsenite	UN1636 Mercury cyanide
UN1587 Copper cyanide	UN1637 Mercury gluconate
UN1588 Cyanides, inorganic, solid, n.o.s.	UN1638 Mercury iodide
UN1589 Cyanogen chloride, stabilized	UN1639 Mercury nucleate
UN1590 Dichloroanilines, liquid	UN1640 Mercury oleate
UN1591 <i>o</i> -Dichlorobenzene	UN1641 Mercury oxide
UN1593 Dichloromethane	UN1642 Mercury oxycyanide, desensitized
UN1594 Diethyl sulfate	UN1643 Mercury potassium iodide
UN1595 Dimethyl sulfate	UN1644 Mercury salicylate
UN1596 Dinitroanilines	UN1645 Mercury sulfates
UN1597 Dinitrobenzenes, liquid	UN1646 Mercury thiocyanate
UN1598 Dinitro- <i>o</i> -cresol	UN1647 Methyl bromide and ethylene dibromide mixtures, liquid
UN1599 Dinitrophenol solutions	UN1648 Acetonitrile
UN1600 Dinitrotoluenes, molten	UN1649 Motor fuel anti-knock mixtures
UN1601 Disinfectants, solid, toxic, n.o.s.	UN1650 beta-Naphthylamine
UN1602 Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s.	UN1650 beta-Naphthylamine, solid
UN1603 Ethyl bromoacetate	UN1651 Naphthylthiourea
UN1604 Ethylenediamine	UN1652 Naphthylurea
UN1605 Ethylene dibromide	UN1653 Nickel cyanide

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN1654 Nicotine	UN1708 Toluidines , liquid
UN1655 Nicotine compounds, solid, n.o.s. <i>or</i> Nicotine preparations, solid, n.o.s.	UN1709 2,4-Toluylenediamine, solid <i>or</i> 2,4- Toluenediamine, solid
UN1656 Nicotine hydrochloride liquid <i>or</i> solution	UN1710 Trichloroethylene
UN1657 Nicotine salicylate	UN1711 Xylidines, liquid
UN1658 Nicotine sulfate solution	UN1712 Zinc arsenate <i>or</i> Zinc arsenite <i>or</i> Zinc arsenate and zinc arsenite mixtures
UN1659 Nicotine tartrate	UN1713 Zinc cyanide
UN1660 Nitric oxide, compressed	UN1714 Zinc phosphide
UN1661 Nitroanilines (o-; m-; p-;)	UN1715 Acetic anhydride
UN1662 Nitrobenzene	UN1716 Acetyl bromide
UN1663 Nitrophenols (o-; m-; p-;)	UN1717 Acetyl chloride
UN1664 Nitrotoluenes, liquid	UN1718 Butyl acid phosphate
UN1665 Nitroxylenes, liquid	UN1719 Caustic alkali liquids, n.o.s.
UN1669 Pentachloroethane	UN1722 Allyl chloroformate
UN1670 Perchloromethyl mercaptan	UN1723 Allyl iodide
UN1671 Phenol, solid	UN1724 Allyltrichlorosilane, stabilized
UN1672 Phenylcarbylamine chloride	UN1725 Aluminum bromide, anhydrous
UN1673 Phenylenediamines (o-; m-; p-;)	UN1726 Aluminum chloride, anhydrous
UN1674 Phenylmercuric acetate	UN1727 Ammonium hydrogendifluoride, solid
UN1677 Potassium arsenate	UN1728 Amyltrichlorosilane
UN1678 Potassium arsenite	UN1729 Anisoyl chloride
UN1679 Potassium cuprocyanide	UN1730 Antimony pentachloride, liquid
UN1680 Potassium cyanide, solid	UN1731 Antimony pentachloride, solutions
UN1683 Silver arsenite	UN1732 Antimony pentafluoride
UN1684 Silver cyanide	UN1733 Antimony trichloride, liquid
UN1685 Sodium arsenate	UN1733 Antimony trichloride, solid
UN1686 Sodium arsenite, aqueous solutions	UN1736 Benzoyl chloride
UN1687 Sodium azide	UN1737 Benzyl bromide
UN1688 Sodium cacodylate	UN1738 Benzyl chloride
UN1689 Sodium cyanide, solid	UN1739 Benzyl chloroformate
UN1690 Sodium fluoride, solid	UN1740 Hydrogendifluorides, n.o.s.
UN1691 Strontium arsenite	UN1741 Boron trichloride
UN1692 Strychnine <i>or</i> Strychnine salts	UN1742 Boron trifluoride acetic acid complex, liquid
UN1693 Tear gas substances, liquid, n.o.s.	UN1743 Boron trifluoride propionic acid complex, liquid
UN1694 Bromobenzyl cyanides, liquid	UN1744 Bromine <i>or</i> Bromine solutions
UN1695 Chloroacetone, stabilized	UN1745 Bromine pentafluoride
UN1697 Chloroacetophenone, solid (CN)	UN1746 Bromine trifluoride
UN1698 Diphenylamine chloroarsine	UN1747 Butyltrichlorosilane
UN1699 Diphenylchloroarsine, liquid	UN1748 Calcium hypochlorite, dry <i>or</i> Calcium hypochlorite mixtures dry
UN1700 Tear gas candles	UN1749 Chlorine trifluoride
UN1701 Xylol bromide, liquid	
UN1702 1, 1, 2, 2-Tetrachloroethane	
UN1704 Tetraethyl dithiopyrophosphate	
UN1707 Thallium compounds, n.o.s.	

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN1750 Chloroacetic acid, solution	UN1796 Nitrating acid mixtures
UN1751 Chloroacetic acid, solid	UN1798 Nitrohydrochloric acid
UN1752 Chloroacetyl chloride	UN1799 Nonyltrichlorosilane
UN1753 Chlorophenyltrichlorosilane	UN1800 Octadecyltrichlorosilane
UN1754 Chlorosulfonic acid	UN1801 Octyltrichlorosilane
UN1755 Chromic acid solution	UN1802 Perchloric acid
UN1756 Chromic fluoride, solid	UN1803 Phenolsulfonic acid, liquid
UN1757 Chromic fluoride, solution	UN1804 Phenyltrichlorosilane
UN1758 Chromium oxychloride	UN1805 Phosphoric acid solution
UN1759 Corrosive solids, n.o.s.	UN1806 Phosphorus pentachloride
UN1760 Corrosive liquids, n.o.s.	UN1807 Phosphorus pentoxide
UN1761 Cupriethylenediamine solution	UN1808 Phosphorus tribromide
UN1762 Cyclohexenyltrichlorosilane	UN1809 Phosphorus trichloride
UN1763 Cyclohexyltrichlorosilane	UN1810 Phosphorus oxychloride
UN1764 Dichloroacetic acid	UN1811 Potassium hydrogendifluoride solid
UN1765 Dichloroacetyl chloride	UN1812 Potassium fluoride, solid
UN1766 Dichlorophenyltrichlorosilane	UN1813 Potassium hydroxide, solid
UN1767 Diethyldichlorosilane	UN1814 Potassium hydroxide, solution
UN1768 Difluorophosphoric acid, anhydrous	UN1815 Propionyl chloride
UN1769 Diphenyldichlorosilane	UN1816 Propyltrichlorosilane
UN1770 Diphenylmethyl bromide	UN1817 Pyrosulfuryl chloride
UN1771 Dodecyltrichlorosilane	UN1818 Silicon tetrachloride
UN1773 Ferric chloride, anhydrous	UN1819 Sodium aluminate, solution
UN1774 Fire extinguisher charges	UN1823 Sodium hydroxide, solid
UN1775 Fluoroboric acid	UN1824 Sodium hydroxide solution
UN1776 Fluorophosphoric acid anhydrous	UN1825 Sodium monoxide
UN1777 Fluorosulfonic acid	UN1826 Nitrating acid mixtures, spent
UN1778 Fluorosilicic acid	UN1827 Stannic chloride, anhydrous
UN1779 Formic acid	UN1828 Sulfur chlorides
UN1780 Fumaryl chloride	UN1829 Sulfur trioxide, stabilized
UN1781 Hexadecyltrichlorosilane	UN1830 Sulfuric acid
UN1782 Hexafluorophosphoric acid	UN1831 Sulfuric acid, fuming
UN1783 Hexamethylenediamine solution	UN1832 Sulfuric acid, spent
UN1784 Hexyltrichlorosilane	UN1833 Sulfurous acid
UN1786 Hydrofluoric acid and Sulfuric acid mixtures	UN1834 Sulfuryl chloride
UN1787 Hydriodic acid	UN1835 Tetramethylammonium hydroxide solution
UN1788 Hydrobromic acid	UN1836 Thionyl chloride
UN1789 Hydrochloric acid	UN1837 Thiophosphoryl chloride
UN1790 Hydrofluoric acid	UN1838 Titanium tetrachloride
UN1791 Hypochlorite solutions	UN1839 Trichloroacetic acid
UN1792 Iodine monochloride	UN1840 Zinc chloride, solution
UN1793 Isopropyl acid phosphate	UN1841 Acetaldehyde ammonia
UN1794 Lead sulfate	UN1843 Ammonium dinitro- <i>o</i> -cresolate, solid
	UN1845 Carbon dioxide, solid <i>or</i> Dry ice

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN1846 Carbon tetrachloride	UN1912 Methyl chloride and methylene chloride mixtures
UN1847 Potassium sulfide, hydrated	UN1913 Neon, refrigerated liquid
UN1848 Propionic acid	UN1914 Butyl propionates
UN1849 Sodium sulfide, hydrated	UN1915 Cyclohexanone
UN1851 Medicine, liquid, toxic, n.o.s.	UN1916 2,2'-Dichlorodiethyl ether
UN1854 Barium alloys, pyrophoric	UN1917 Ethyl acrylate, stabilized
UN1855 Calcium, pyrophoric <i>or</i> Calcium alloys, pyrophoric	UN1918 Isopropylbenzene
UN1856 Rags, oily	UN1919 Methyl acrylate, stabilized
UN1857 Textiles waste, wet	UN1920 Nonanes
UN1858 Hexafluoropropylene, compressed <i>or</i> Refrigerant gas R 1216	UN1921 Propyleneimine, stabilized
UN1859 Silicon tetrafluoride	UN1922 Pyrrolidine
UN1860 Vinyl fluoride, stabilized	UN1923 Calcium dithionite <i>or</i> Calcium hydrosulfite
UN1862 Ethyl crotonate	UN1928 Methyl magnesium bromide, in ethyl ether
UN1863 Fuel, aviation, turbine engine	UN1929 Potassium dithionite <i>or</i> Potassium hydrosulfite
UN1865 n-Propyl nitrate	
UN1866 Resin solution	UN1931 Zinc dithionite <i>or</i> Zinc hydrosulfite
UN1868 Decaborane	UN1932 Zirconium scrap
UN1869 Magnesium <i>or</i> Magnesium alloys	UN1935 Cyanide solutions, n.o.s.
UN1870 Potassium borohydride	UN1938 Bromoacetic acid solution
UN1871 Titanium hydride	UN1939 Phosphorus oxybromide
UN1872 Lead dioxide	UN1940 Thioglycolic acid
UN1873 Perchloric acid	UN1941 Dibromodifluoromethane
UN1884 Barium oxide	UN1942 Ammonium nitrate
UN1885 Benzidine	UN1944 Matches, safety
UN1886 Benzylidene chloride	UN1945 Matches, wax, Vesta
UN1887 Bromochloromethane	UN1950 Aerosols
UN1888 Chloroform	UN1950 Aerosols, flammable, n.o.s.
UN1889 Cyanogen bromide	UN1951 Argon, refrigerated liquid
UN1891 Ethyl bromide	UN1952 Ethylene oxide and carbon dioxide mixtures
UN1892 Ethyldichloroarsine	
UN1894 Phenylmercuric hydroxide	UN1953 Compressed gas, toxic, flammable, n.o.s.
UN1895 Phenylmercuric nitrate	UN1954 Compressed gases, flammable, n.o.s.
UN1897 Tetrachloroethylene	UN1955 Compressed gas, toxic, n.o.s.
UN1898 Acetyl iodide	UN1956 Compressed gas, n.o.s.
UN1902 Diisooctyl acid phosphate	UN1957 Deuterium, compressed
UN1903 Disinfectant, liquid, corrosive n.o.s.	UN1958 1,2-Dichloro-1,1,2,2-Tetrafluoroethane <i>or</i> Refrigerant gas, R114
UN1905 Selenic acid	
UN1906 Sludge, acid	UN1959 1,1-Difluoroethylene <i>or</i> Refrigerant gas R 1132a
UN1907 Soda lime	UN1961 Ethane, refrigerated liquid
UN1908 Chlorite solution	UN1962 Ethylene
UN1910 Calcium oxide	UN1963 Helium, refrigerated liquid
UN1911 Diborane	

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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN1964 Hydrocarbon gas mixture, compressed, n.o.s.	UN1994 Iron pentacarbonyl
UN1965 Hydrocarbon gas mixture, liquefied, n.o.s.	UN1999 Tars, liquid
UN1966 Hydrogen, refrigerated liquid	UN2000 Celluloid
UN1967 Insecticide gases, toxic, n.o.s.	UN2001 Cobalt naphthenates, powder
UN1968 Insecticide gases, n.o.s.	UN2002 Celluloid, scrap
UN1969 Isobutane	UN2004 Magnesium diamide
UN1970 Krypton, refrigerated liquid	UN2005 Magnesium diphenyl
UN1971 Methane, compressed <i>or</i> Natural gas, compressed	UN2006 Plastics, nitrocellulose-based, self-heating, n.o.s.
UN1972 Methane, refrigerated liquid <i>or</i> Natural gas, refrigerated liquid	UN2008 Zirconium powder, dry
UN1973 Chlorodifluoromethane and chloropentafluoroethane mixture <i>or</i> Refrigerant gas R 502	UN2009 Zirconium, dry
UN1974 Chlorodifluorobromomethane <i>or</i> Refrigerant gas R 12B1	UN2010 Magnesium hydride
UN1975 Nitric oxide and dinitrogen tetroxide mixtures <i>or</i> Nitric oxide and nitrogen dioxide mixtures	UN2011 Magnesium phosphide
UN1976 Octafluorocyclobutane <i>or</i> Refrigerant gas R C318	UN2012 Potassium phosphide
UN1977 Nitrogen, refrigerated liquid	UN2013 Strontium phosphide
UN1978 Propane <i>see also</i> Petroleum gases, liquefied	UN2014 Hydrogen peroxide, aqueous solutions
UN1979 Rare gases, mixtures, compressed	UN2015 Hydrogen peroxide, stabilized <i>or</i> Hydrogen peroxide aqueous solutions, stabilized
UN1980 Rare gases and oxygen mixtures, compressed	UN2016 Ammunition, toxic, non-explosive
UN1981 Rare gases and nitrogen mixtures, compressed	UN2017 Ammunition, tear-producing, non-explosive
UN1982 Tetrafluoromethane <i>or</i> Refrigerant gas R 14	UN2018 Chloroanilines, solid
UN1983 1-Chloro-2,2,2-trifluoroethane <i>or</i> Refrigerant gas R 133a	UN2019 Chloroanilines, liquid
UN1984 Trifluoromethane <i>or</i> Refrigerant gas R 23	UN2020 Chlorophenols, solid
UN1986 Alcohols, flammable, toxic, n.o.s.	UN2021 Chlorophenols, liquid
UN1987 Alcohols, n.o.s.	UN2022 Cresylic acid
UN1988 Aldehydes, flammable, toxic, n.o.s.	UN2023 Epichlorohydrin
UN1989 Aldehydes, n.o.s.	UN2024 Mercury compounds, liquid, n.o.s.
UN1990 Benzaldehyde	UN2025 Mercury compounds, solid, n.o.s.
UN1991 Chloroprene, stabilized	UN2026 Phenylmercuric compounds, n.o.s.
UN1992 Flammable liquids, toxic, n.o.s.	UN2027 Sodium arsenite, solid
UN1993 Flammable liquids, n.o.s.	UN2028 Bombs, smoke, non-explosive
	UN2029 Hydrazine, anhydrous
	UN2030 Hydrazine aqueous solutions
	UN2031 Nitric acid
	UN2032 Nitric acid, red fuming
	UN2033 Potassium monoxide
	UN2034 Hydrogen and Methane mixtures, compressed
	UN2035 1,1,1-Trifluoroethane, compressed <i>or</i> Refrigerant gas R 143a
	UN2036 Xenon
	UN2037 Gas cartridges

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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN2037 Receptacles, small, containing gas (gas cartridges)	UN2202 Hydrogen selenide, anhydrous
UN2038 Dinitrotoluenes	UN2203 Silane
UN2044 2,2-Dimethylpropane	UN2204 Carbonyl sulfide
UN2045 Isobutyraldehyde <i>or</i> Isobutyl aldehyde	UN2205 Adiponitrile
UN2046 Cymenes	UN2206 Isocyanates, toxic, n.o.s. <i>or</i> Isocyanate, solutions, toxic, n.o.s.
UN2047 Dichloropropenes	UN2208 Calcium hypochlorite mixtures, dry
UN2048 Dicyclopentadiene	UN2209 Formaldehyde, solutions
UN2049 Diethylbenzene	UN2210 Maneb <i>or</i> Maneb preparations
UN2050 Diisobutylene, isomeric compounds	UN2211 Polymeric beads, expandable
UN2051 2-Dimethylaminoethanol	UN2212 Blue asbestos <i>or</i> Brown asbestos
UN2052 Dipentene	UN2213 Paraformaldehyde
UN2053 Methyl isobutyl carbinol	UN2214 Phthalic anhydride
UN2054 Morpholine	UN2215 Maleic anhydride
UN2055 Styrene monomer, stabilized	UN2215 Maleic anhydride, molten
UN2056 Tetrahydrofuran	UN2216 Fish meal, stabilized <i>or</i> Fish scrap, stabilized
UN2057 Tripropylene	UN2217 Seed cake
UN2058 Valeraldehyde	UN2218 Acrylic acid, stabilized
UN2059 Nitrocellulose, solution, flammable	UN2219 Allyl glycidyl ether
UN2067 Ammonium nitrate based fertilizers	UN2222 Anisole
UN2071 Ammonium nitrate based fertilizers	UN2224 Benzonitrile
UN2073 Ammonia solutions	UN2225 Benzene sulfonyl chloride
UN2074 Acrylamide, solid	UN2226 Benzotrichloride
UN2075 Chloral, anhydrous, stabilized	UN2227 n-Butyl methacrylate, stabilized
UN2076 Cresols, liquid	UN2232 2-Chloroethanal
UN2077 alpha-Naphthylamine	UN2233 Chloroanisidines
UN2078 Toluene diisocyanate	UN2234 Chlorobenzotrifluorides
UN2079 Diethylenetriamine	UN2235 Chlorobenzyl chlorides, liquid
UN2186 Hydrogen chloride, refrigerated liquid	UN2236 3-Chloro-4-methylphenyl isocyanate, liquid
UN2187 Carbon dioxide, refrigerated liquid	UN2237 Chloronitroanilines
UN2188 Arsine	UN2238 Chlorotoluenes
UN2189 Dichlorosilane	UN2239 Chlorotoluidines, solid
UN2190 Oxygen difluoride, compressed	UN2240 Chromosulfuric acid
UN2191 Sulfuryl fluoride	UN2241 Cycloheptane
UN2192 Germane	UN2242 Cycloheptene
UN2193 Hexafluoroethane <i>or</i> Refrigerant gas R 116	UN2243 Cyclohexyl acetate
UN2194 Selenium hexafluoride	UN2244 Cyclopentanol
UN2195 Tellurium hexafluoride	UN2245 Cyclopentanone
UN2196 Tungsten hexafluoride	UN2246 Cyclopentene
UN2197 Hydrogen iodide, anhydrous	UN2247 n-Decane
UN2198 Phosphorus	UN2248 Di-n-butylamine
UN2199 Phosphine	UN2249 Dichlorodimethyl ether, symmetrical
UN2200 Propadiene, stabilized	
UN2201 Nitrous oxide, refrigerated liquid	

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN2250 Dichlorophenyl isocyanates	UN2296 Methylcyclohexane
UN2251 Bicyclo[2,2,1]hepta-2,5-diene, stabilized <i>or</i> 2,5-Norbornadiene stabilized	UN2297 Methylcyclohexanone
UN2252 1,2-Dimethoxyethane	UN2298 Methylcyclopentane
UN2253 N,N-Dimethylaniline	UN2299 Methyl dichloroacetate
UN2254 Matches, fusee	UN2300 2-Methyl-5-ethylpyridine
UN2256 Cyclohexene	UN2301 2-Methylfuran
UN2257 Potassium	UN2302 5-Methylhexan-2-one
UN2258 1,2-Propylenediamine	UN2303 Isopropenylbenzene
UN2259 Triethylenetetramine	UN2304 Naphthalene, molten
UN2260 Tripropylamine	UN2305 Nitrobenzenesulfonic acid
UN2261 Xylenols, solid	UN2306 Nitrobenzotrifluorides, liquid
UN2262 Dimethylcarbamoyl chloride	UN2307 3-Nitro-4-chlorobenzotrifluoride
UN2263 Dimethylcyclohexanes	UN2308 Nitrosylsulfuric acid, liquid
UN2264 N,N-Dimethylcyclohexylamine	UN2309 Octadiene
UN2265 N,N-Dimethylformamide	UN2310 Pentane-2,4-dione
UN2266 Dimethyl-N-propylamine	UN2311 Phenetidines
UN2267 Dimethyl thiophosphoryl chloride	UN2312 Phenol, molten
UN2269 3,3'-Iminodipropylamine	UN2313 Picolines
UN2270 Ethylamine, aqueous solution	UN2315 Polychlorinated biphenyls, liquid
UN2271 Ethyl amyl ketone	UN2316 Sodium cuprocyanide, solid
UN2272 n-Ethylaniline	UN2317 Sodium cuprocyanide, solution
UN2273 2-Ethylaniline	UN2318 Sodium hydrosulfide
UN2274 N-Ethyl-N-benzylaniline	UN2319 Terpene hydrocarbons, n.o.s.
UN2275 2-Ethylbutanol	UN2320 Tetraethylenepentamine
UN2276 2-Ethylhexylamine	UN2321 Trichlorobenzenes, liquid
UN2277 Ethyl methacrylate, stabilized	UN2322 Trichlorobutene
UN2278 n-Heptene	UN2323 Triethyl phosphite
UN2279 Hexachlorobutadiene	UN2324 Triisobutylene
UN2280 Hexamethylenediamine, solid	UN2325 1,3,5-Trimethylbenzene
UN2281 Hexamethylene diisocyanate	UN2326 Trimethylcyclohexylamine
UN2282 Hexanols	UN2327 Trimethylhexamethylenediamines
UN2283 Isobutyl methacrylate, stabilized	UN2328 Trimethylhexamethylene diisocyanate
UN2284 Isobutyronitrile	UN2329 Trimethyl phosphite
UN2285 Isocyanatobenzotrifluorides	UN2330 Undecane
UN2286 Pentamethylheptane	UN2331 Zinc chloride, anhydrous
UN2287 Isoheptenes	UN2332 Acetaldehyde oxime
UN2288 Isohexenes	UN2333 Allyl acetate
UN2289 Isophoronediamine	UN2334 Allylamine
UN2290 Isophorone diisocyanate	UN2335 Allyl ethyl ether
UN2291 Lead compounds, soluble, n.o.s.	UN2336 Allyl formate
UN2293 4-Methoxy-4-methylpentan-2-one	UN2337 Phenyl mercaptan
UN2294 N-Methylaniline	UN2338 Benzotrifluoride
UN2295 Methyl chloroacetate	UN2339 2-Bromobutane
	UN2340 2-Bromoethyl ethyl ether



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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN2341 1-Bromo-3-methylbutane	UN2389 Furan
UN2342 Bromomethylpropanes	UN2390 2-Iodobutane
UN2343 2-Bromopentane	UN2391 Iodomethylpropanes
UN2344 Bromopropanes	UN2392 Iodopropanes
UN2345 3-Bromopropyne	UN2393 Isobutyl formate
UN2346 Butanedione	UN2394 Isobutyl propionate
UN2347 Butyl mercaptans	UN2395 Isobutyryl chloride
UN2348 Butyl acrylates, stabilized	UN2396 Methacrylaldehyde, stabilized
UN2350 Butyl methyl ether	UN2397 3-Methylbutan-2-one
UN2351 Butyl nitrites	UN2398 Methyl tert-butyl ether
UN2352 Butyl vinyl ether, stabilized	UN2399 1-Methylpiperidine
UN2353 Butyryl chloride	UN2400 Methyl isovalerate
UN2354 Chloromethyl ethyl ether	UN2401 Piperidine
UN2356 2-Chloropropane	UN2402 Propanethiols
UN2357 Cyclohexylamine	UN2403 Isopropenyl acetate
UN2358 Cyclooctatetraene	UN2404 Propionitrile
UN2359 Diallylamine	UN2405 Isopropyl butyrate
UN2360 Diallylether	UN2406 Isopropyl isobutyrate
UN2361 Diisobutylamine	UN2407 Isopropyl chloroformate
UN2362 1,1-Dichloroethane	UN2409 Isopropyl propionate
UN2363 Ethyl mercaptan	UN2410 1,2,3,6-Tetrahydropyridine
UN2364 n-Propyl benzene	UN2411 Butyronitrile
UN2366 Diethyl carbonate	UN2412 Tetrahydrothiophene
UN2367 alpha-Methylvaleraldehyde	UN2413 Tetrapropylorthotitanate
UN2368 alpha-Pinene	UN2414 Thiophene
UN2370 1-Hexene	UN2416 Trimethyl borate
UN2371 Isopentenes	UN2417 Carbonyl fluoride
UN2372 1,2-Di-(dimethylamino)ethane	UN2418 Sulfur tetrafluoride
UN2373 Diethoxymethane	UN2419 Bromotrifluoroethylene
UN2374 3,3-Diethoxypropene	UN2420 Hexafluoroacetone
UN2375 Diethyl sulfide	UN2421 Nitrogen trioxide
UN2376 2,3-Dihydropyran	UN2422 Octafluorobut-2-ene <i>or</i> Refrigerant gas R 1318
UN2377 1,1-Dimethoxyethane	
UN2378 2-Dimethylaminoacetonitrile	UN2424 Octafluoropropane <i>or</i> Refrigerant gas R 218
UN2379 1,3-Dimethylbutylamine	
UN2380 Dimethyldiethoxysilane	UN2426 Ammonium nitrate, liquid
UN2381 Dimethyl disulfide	UN2427 Potassium chlorate, aqueous solution
UN2382 Dimethylhydrazine, symmetrical	UN2428 Sodium chlorate, aqueous solution
UN2383 Dipropylamine	UN2429 Calcium chlorate aqueous solution
UN2384 Di-n-propyl ether	UN2429 Calcium chlorate aqueous solution
UN2385 Ethyl isobutyrate	UN2430 Alkylphenols, solid, n.o.s.
UN2386 1-Ethylpiperidine	UN2431 Anisidines
UN2387 Fluorobenzene	UN2432 N,N-Diethylaniline
UN2388 Fluorotoluenes	UN2433 Chloronitrotoluenes, liquid

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN2434 Dibenzylchlorosilane	UN2481 Ethyl isocyanate
UN2435 Ethylphenyldichlorosilane	UN2482 n-Propyl isocyanate
UN2436 Thioacetic acid	UN2483 Isopropyl isocyanate
UN2437 Methylphenyldichlorosilane	UN2484 tert-Butyl isocyanate
UN2438 Trimethylacetyl chloride	UN2485 n-Butyl isocyanate
UN2439 Sodium hydrogendifluoride	UN2486 Isobutyl isocyanate
UN2440 Stannic chloride, pentahydrate	UN2487 Phenyl isocyanate
UN2441 Titanium trichloride, pyrophoric <i>or</i> Titanium trichloride mixtures, pyrophoric	UN2488 Cyclohexyl isocyanate
UN2442 Trichloroacetyl chloride	UN2490 Dichloroisopropyl ether
UN2443 Vanadium oxytrichloride	UN2491 Ethanolamine <i>or</i> Ethanolamine solutions
UN2444 Vanadium tetrachloride	UN2493 Hexamethyleneimine
UN2445 Lithium alkyls, liquid	UN2495 Iodine pentafluoride
UN2446 Nitro cresols, solid	UN2496 Propionic anhydride
UN2447 Phosphorus white, molten	UN2498 1,2,3,6-Tetrahydrobenzaldehyde
UN2448 Sulfur, molten	UN2501 Tris-(1-aziridinyl)phosphine oxide, solution
UN2451 Nitrogen trifluoride	UN2502 Valeryl chloride
UN2452 Ethylacetylene, stabilized	UN2503 Zirconium tetrachloride
UN2453 Ethyl fluoride <i>or</i> Refrigerant gas R 161	UN2504 Tetrabromoethane
UN2454 Methyl fluoride <i>or</i> Refrigerant gas R 41	UN2505 Ammonium fluoride
UN2456 2-Chloropropene	UN2506 Ammonium hydrogen sulfate
UN2457 2,3-Dimethylbutane	UN2507 Chloroplatinic acid, solid
UN2458 Hexadienes	UN2508 Molybdenum pentachloride
UN2459 2-Methyl-1-butene	UN2509 Potassium hydrogen sulfate
UN2460 2-Methyl-2-butene	UN2511 2-Chloropropionic acid
UN2461 Methylpentadienes	UN2512 Aminophenols (o-; m-; p-)
UN2463 Aluminum hydride	UN2513 Bromoacetyl bromide
UN2464 Beryllium nitrate	UN2514 Bromobenzene
UN2465 Dichloroisocyanuric acid, dry <i>or</i> Dichloroisocyanuric acid salts	UN2515 Bromoform
UN2466 Potassium superoxide	UN2516 Carbon tetrabromide
UN2468 Trichloroisocyanuric acid, dry	UN2517 1-Chloro-1,1-difluoroethanes <i>or</i> Refrigerant gas R 142b
UN2469 Zinc bromate	UN2518 1,5,9-Cyclododecatriene
UN2470 Phenylacetonitrile, liquid	UN2520 Cyclooctadienes
UN2471 Osmium tetroxide	UN2521 Diketene, stabilized
UN2473 Sodium arsanilate	UN2522 2-Dimethylaminoethyl methacrylate
UN2474 Thiophosgene	UN2524 Ethyl orthoformate
UN2475 Vanadium trichloride	UN2525 Ethyl oxalate
UN2477 Methyl isothiocyanate	UN2526 Furfurylamine
UN2478 Isocyanates, flammable, toxic, n.o.s. <i>or</i> Isocyanate solutions, flammable, toxic, n.o.s.	UN2527 Isobutyl acrylate, stabilized
UN2480 Methyl isocyanate	UN2528 Isobutyl isobutyrate
	UN2529 Isobutyric acid
	UN2531 Methacrylic acid, stabilized
	UN2533 Methyl trichloroacetate

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN2534 Methylchlorosilane	UN2586 Alkyl sulfonic acids, liquid <i>or</i> Aryl sulfonic acids, liquid
UN2535 4-Methylmorpholine <i>or</i> n-methylmorpholine	UN2587 Benzoquinone
UN2536 Methyltetrahydrofuran	UN2588 Pesticides, solid, toxic, n.o.s.
UN2538 Nitronaphthalene	UN2589 Vinyl chloroacetate
UN2541 Terpinolene	UN2590 White asbestos
UN2542 Tributylamine	UN2591 Xenon, refrigerated liquid
UN2545 Hafnium powder, dry	UN2599 Chlorotrifluoromethane and trifluoromethane azeotropic mixture <i>or</i> Refrigerant gas R 503
UN2546 Titanium powder, dry	UN2600 Carbon monoxide and hydrogen mixture, compressed
UN2547 Sodium superoxide	UN2601 Cyclobutane
UN2548 Chlorine pentafluoride	UN2602 Dichlorodifluoromethane and difluoroethane azeotropic mixture <i>or</i> Refrigerant gas R 500
UN2552 Hexafluoroacetone hydrate, liquid	UN2603 Cycloheptatriene
UN2554 Methyl allyl chloride	UN2604 Boron trifluoride diethyl etherate
UN2555 Nitrocellulose with water	UN2605 Methoxymethyl isocyanate
UN2556 Nitrocellulose with alcohol	UN2606 Methyl orthosilicate
UN2557 Nitrocellulose <i>or</i> Nitrocellulose mixture with pigment <i>or</i> Nitrocellulose mixture with plasticizer <i>or</i> Nitrocellulose mixture with pigment and plasticizer	UN2607 Acrolein dimer, stabilized
UN2558 Epibromohydrin	UN2608 Nitropropanes
UN2560 2-Methylpentan-2-ol	UN2609 Triallyl borate
UN2561 3-Methyl-1-butene	UN2610 Triallylamine
UN2564 Trichloroacetic acid, solution	UN2611 Propylene chlorohydrin
UN2565 Dicyclohexylamine	UN2612 Methyl propyl ether
UN2567 Sodium pentachlorophenate	UN2614 Methallyl alcohol
UN2570 Cadmium compounds	UN2615 Ethyl propyl ether
UN2571 Alkylsulfuric acids	UN2616 Triisopropyl borate
UN2572 Phenylhydrazine	UN2617 Methylcyclohexanols
UN2573 Thallium chlorate	UN2618 Vinyltoluenes, stabilized
UN2574 Tricresyl phosphate	UN2619 Benzyl dimethylamine
UN2576 Phosphorus oxybromide, molten	UN2620 Amyl butyrates
UN2577 Phenylacetyl chloride	UN2621 Acetyl methyl carbinol
UN2578 Phosphorus trioxide	UN2622 Glycidaldehyde
UN2579 Piperazine	UN2623 Firelighters, solid
UN2580 Aluminum bromide, solution	UN2624 Magnesium silicide
UN2581 Aluminum chloride, solution	UN2626 Chloric acid aqueous solution
UN2582 Ferric chloride, solution	UN2627 Nitrites, inorganic, n.o.s.
UN2583 Alkyl sulfonic acids, solid <i>or</i> Aryl sulfonic acids, solid	UN2628 Potassium fluoroacetate
UN2584 Alkyl sulfonic acids, liquid <i>or</i> Aryl sulfonic acids, liquid	UN2629 Sodium fluoroacetate
UN2585 Alkyl sulfonic acids, solid <i>or</i> Aryl sulfonic acids, solid	UN2630 Selenates <i>or</i> Selenites
	UN2642 Fluoroacetic acid
	UN2643 Methyl bromoacetate
	UN2644 Methyl iodide
	UN2645 Phenacyl bromide

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN2646 Hexachlorocyclopentadiene	UN2707 Dimethyldioxanes
UN2647 Malononitrile	UN2709 Butyl benzenes
UN2648 1,2-Dibromobutan-3-one	UN2710 Dipropyl ketone
UN2649 1,3-Dichloroacetone	UN2713 Acridine
UN2650 1,1-Dichloro-1-nitroethane	UN2714 Zinc resinate
UN2651 4,4'-Diaminodiphenyl methane	UN2715 Aluminum resinate
UN2653 Benzyl iodide	UN2716 1,4-Butynediol
UN2655 Potassium fluorosilicate	UN2717 Camphor
UN2656 Quinoline	UN2719 Barium bromate
UN2657 Selenium disulfide	UN2720 Chromium nitrate
UN2659 Sodium chloroacetate	UN2721 Copper chlorate
UN2660 Nitrotoluidines (mono)	UN2722 Lithium nitrate
UN2661 Hexachloroacetone	UN2723 Magnesium chlorate
UN2662 Hydroquinone, solid	UN2724 Manganese nitrate
UN2664 Dibromomethane	UN2725 Nickel nitrate
UN2667 Butyltoluenes	UN2726 Nickel nitrite
UN2668 Chloroacetonitrile	UN2727 Thallium nitrate
UN2669 Chlorocresols solution	UN2728 Zirconium nitrate
UN2670 Cyanuric chloride	UN2729 Hexachlorobenzene
UN2671 Aminopyridines (o-; m-; p-)	UN2730 Nitroanisole, liquid
UN2672 Ammonia solutions	UN2732 Nitrobromobenzenes, liquid
UN2673 2-Amino-4-chlorophenol	UN2733 Amines, flammable, corrosive, n.o.s. <i>or</i> Polyamines, flammable, corrosive, n.o.s.
UN2674 Sodium fluorosilicate	UN2734 Amines, liquid, corrosive, flammable, n.o.s. <i>or</i> Polyamines, liquid, corrosive, flammable, n.o.s.
UN2676 Stibine	
UN2677 Rubidium hydroxide solution	UN2735 Amines, liquid, corrosive, n.o.s. <i>or</i> Polyamines, liquid, corrosive, n.o.s.
UN2678 Rubidium hydroxide	UN2738 N-Butylaniline
UN2679 Lithium hydroxide, solution	UN2739 Butyric anhydride
UN2680 Lithium hydroxide	UN2740 n-Propyl chloroformate
UN2681 Caesium hydroxide solution	UN2741 Barium hypochlorite
UN2682 Caesium hydroxide	UN2742 Chloroformates, toxic, corrosive, flammable, n.o.s.
UN2683 Ammonium sulfide solution	UN2743 n-Butyl chloroformate
UN2684 3-Diethylamino-propylamine	UN2744 Cyclobutyl chloroformate
UN2685 N,N-Diethylethylenediamine	UN2745 Chloromethyl chloroformate
UN2686 2-Diethylaminoethanol	UN2746 Phenyl chloroformate
UN2687 Dicyclohexylammonium nitrite	UN2747 tert-Butylcyclohexylchloroformate
UN2688 1-Bromo-3-chloropropane	UN2748 2-Ethylhexyl chloroformate
UN2689 Glycerol alpha-monochlorohydrin	UN2749 Tetramethylsilane
UN2690 N-n-Butyl imidazole	UN2750 1,3-Dichloropropanol-2
UN2691 Phosphorus pentabromide	UN2751 Diethylthiophosphoryl chloride
UN2692 Boron tribromide	UN2752 1,2-Epoxy-3-ethoxypropane
UN2693 Bisulfites, aqueous solutions, n.o.s.	UN2753 N-Ethylbenzyltoluidines liquid
UN2698 Tetrahydrophthalic anhydrides	
UN2699 Trifluoroacetic acid	
UN2705 1-Pentol	

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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN2754 N-Ethyltoluidines	UN2796 Sulfuric acid
UN2757 Carbamate pesticides, solid, toxic	UN2797 Battery fluid, alkali
UN2758 Carbamate pesticides, liquid, flammable, toxic	UN2798 Phenyl phosphorus dichloride
	UN2799 Phenyl phosphorus thiodichloride
UN2759 Arsenical pesticides, solid, toxic	UN2800 Batteries, wet, non-spillable
UN2760 Arsenical pesticides, liquid, flammable, toxic	UN2801 Dyes, liquid, corrosive n.o.s. <i>or</i> Dye intermediates, liquid, n.o.s.
UN2761 Organochlorine pesticides, solid toxic	UN2802 Copper chloride
UN2762 Organochlorine pesticides liquid, flammable, toxic	UN2803 Gallium
UN2763 Triazine pesticides, solid, toxic	UN2805 Lithium hydride, fused solid
UN2764 Triazine pesticides, liquid, flammable, toxic	UN2806 Lithium nitride
UN2771 Thiocarbamate pesticides, solid, toxic	UN2809 Mercury
UN2772 Thiocarbamate pesticide, liquid, flammable, toxic	UN2810 Toxic, liquids, organic, n.o.s.
UN2775 Copper based pesticides, solid, toxic	UN2811 Toxic solids, organic, n.o.s.
UN2776 Copper based pesticides, liquid, flammable, toxic	UN2812 Sodium aluminate, solid
UN2777 Mercury based pesticides, solid, toxic	UN2813 Water-reactive solid, n.o.s.
UN2778 Mercury based pesticides, liquid, flammable, toxic	UN2814 Infectious substances, affecting humans
UN2779 Substituted nitrophenol pesticides, solid, toxic	UN2815 N-Aminoethylpiperazine
UN2780 Substituted nitrophenol pesticides, liquid, flammable, toxic	UN2817 Ammonium hydrogendifluoride, solution
UN2781 Bipyridilium pesticides, solid, toxic	UN2818 Ammonium polysulfide, solution
UN2782 Bipyridilium pesticides, liquid, flammable, toxic	UN2819 Amyl acid phosphate
UN2783 Organophosphorus pesticides, solid, toxic	UN2820 Butyric acid
UN2784 Organophosphorus pesticides, liquid, flammable, toxic	UN2821 Phenol solutions
UN2785 4-Thiapentanal	UN2822 2-Chloropyridine
UN2786 Organotin pesticides, solid, toxic	UN2823 Crotonic acid
UN2787 Organotin pesticides, liquid, flammable, toxic	UN2826 Ethyl chlorothioformate
UN2788 Organotin compounds, liquid, n.o.s.	UN2829 Caproic acid
UN2789 Acetic acid, glacial <i>or</i> Acetic acid solution	UN2830 Lithium ferrosilicon
UN2790 Acetic acid solution	UN2831 1,1,1-Trichloroethane
UN2793 Ferrous metal borings <i>or</i> Ferrous metal shavings <i>or</i> Ferrous metal turnings <i>or</i> Ferrous metal cuttings	UN2834 Phosphorous acid
UN2794 Batteries, wet, filled with acid	UN2835 Sodium aluminum hydride
UN2796 Battery fluid, acid	UN2837 Bisulfate, aqueous solution
	UN2838 Vinyl butyrate, stabilized
	UN2839 Aldol
	UN2840 Butyraldoxime
	UN2841 Di-n-amylamine
	UN2842 Nitroethane
	UN2844 Calcium manganese silicon
	UN2845 Pyrophoric liquids, organic, n.o.s.
	UN2846 Pyrophoric solids, organic, n.o.s.
	UN2849 3-Chloropropanol-1
	UN2850 Propylene tetramer
	UN2851 Boron trifluoride dihydrate
	UN2852 Dipicryl sulfide, wetted

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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN2853 Magnesium fluorosilicate	UN2911 Radioactive material, excepted package-instruments or articles
UN2854 Ammonium fluorosilicate	UN2912 Radioactive material, low specific activity (LSA-I).
UN2855 Zinc fluorosilicate	UN2913 Radioactive material, surface contaminated objects (SCO-I <i>or</i> SCO-II)
UN2856 Fluorosilicates, n.o.s.	UN2915 Radioactive material, Type A package
UN2857 Refrigerating machines	UN2916 Radioactive material, Type B(U) package
UN2858 Zirconium, dry	UN2917 Radioactive material, Type B(M) package
UN2859 Ammonium metavanadate	UN2919 Radioactive material, transported under special arrangement
UN2861 Ammonium polyvanadate	UN2920 Corrosive liquids, flammable, n.o.s.
UN2862 Vanadium pentoxide	UN2921 Corrosive solids, flammable, n.o.s.
UN2863 Sodium ammonium vanadate	UN2922 Corrosive liquids, toxic, n.o.s.
UN2864 Potassium metavanadate	UN2923 Corrosive solids, toxic, n.o.s.
UN2865 Hydroxylamine sulfate	UN2924 Flammable liquids, corrosive, n.o.s.
UN2869 Titanium trichloride mixtures	UN2925 Flammable solids, corrosive, organic, n.o.s.
UN2870 Aluminum borohydride <i>or</i> Aluminum borohydride in devices	UN2926 Flammable solids, toxic, organic, n.o.s.
UN2871 Antimony powder	UN2927 Toxic liquids, corrosive, organic, n.o.s.
UN2872 Dibromochloropropane	UN2928 Toxic solids, corrosive, organic, n.o.s.
UN2873 Dibutylaminoethanol	UN2929 Toxic liquids, flammable, organic, n.o.s.
UN2874 Furfuryl alcohol	UN2930 Toxic solids, flammable, organic, n.o.s.
UN2875 Hexachlorophene	UN2931 Vanadyl sulfate
UN2876 Resorcinol	UN2933 Methyl 2-chloropropionate
UN2878 Titanium sponge granules <i>or</i> Titanium sponge powders	UN2934 Isopropyl 2-chloropropionate
UN2879 Selenium oxychloride	UN2935 Ethyl 2-chloropropionate
UN2880 Calcium hypochlorite, hydrated <i>or</i> Calcium hypochlorite, hydrated mixtures	UN2936 Thiolactic acid
UN2881 Metal catalyst, dry	UN2937 alpha-Methylbenzyl alcohol, liquid
UN2900 Infectious substances, affecting animals	UN2940 9-Phosphabicyclononanes <i>or</i> Cyclooctadiene phosphines
UN2901 Bromine chloride	UN2941 Fluoroanilines
UN2902 Pesticides, liquid, toxic, n.o.s.	UN2942 2-Trifluoromethylaniline
UN2903 Pesticides, liquid, toxic, flammable, n.o.s.	UN2943 Tetrahydrofurfurylamine
UN2904 Chlorophenolates, liquid <i>or</i> Phenolates, liquid	UN2945 N-Methylbutylamine
UN2905 Chlorophenolates, solid <i>or</i> Phenolates, solid	UN2946 2-Amino-5-diethylaminopentane
UN2907 Isosorbide dinitrate mixture	UN2947 Isopropyl chloroacetate
UN2908 Radioactive material, excepted package-empty packaging	UN2948 3-Trifluoromethylaniline
UN2909 Radioactive material, excepted package-articles manufactured from natural uranium <i>or</i> depleted uranium <i>or</i> natural thorium	UN2949 Sodium hydrosulfide
UN2910 Radioactive material, excepted package-limited quantity of material	UN2950 Magnesium granules, coated
	UN2956 5-tert-Butyl-2,4,6-trinitro-m-xylene <i>or</i> Musk xylene
	UN2965 Boron trifluoride dimethyl etherate
	UN2966 Thioglycol
	UN2967 Sulfamic acid

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ID NO. PROPER SHIPPING NAME	ID NO. PROPER SHIPPING NAME
UN2968 Maneb stabilized <i>or</i> Maneb preparations, stabilized	UN3016 Bipyridilium pesticides, liquid, toxic
UN2969 Castor beans <i>or</i> Castor meal <i>or</i> Castor pomace <i>or</i> Castor flake	UN3017 Organophosphorus pesticides, liquid, toxic, flammable
UN2977 Radioactive material, uranium hexafluoride, fissile	UN3018 Organophosphorus pesticides, liquid, toxic
UN2978 Radioactive material, uranium hexafluoride	UN3019 Organotin pesticides, liquid, toxic, flammable
UN2983 Ethylene oxide and propylene oxide mixtures	UN3020 Organotin pesticides, liquid, toxic
UN2984 Hydrogen peroxide, aqueous solutions	UN3021 Pesticides, liquid, flammable, toxic
UN2985 Chlorosilanes, flammable, corrosive, n.o.s.	UN3022 1,2-Butylene oxide, stabilized
UN2986 Chlorosilanes, corrosive, flammable, n.o.s.	UN3023 2-Methyl-2-heptanethiol
UN2987 Chlorosilanes, corrosive, n.o.s.	UN3024 Coumarin derivative pesticides, liquid, flammable, toxic
UN2988 Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	UN3025 Coumarin derivative pesticides, liquid, toxic, flammable
UN2989 Lead phosphite, dibasic	UN3026 Coumarin derivative pesticides, liquid, toxic
UN2990 Life-saving appliances, self inflating	UN3027 Coumarin derivative pesticides, solid, toxic
UN2991 Carbamate pesticides, liquid, toxic, flammable	UN3028 Batteries, dry, containing potassium hydroxide solid
UN2992 Carbamate pesticides, liquid, toxic	UN3048 Aluminum phosphide pesticides
UN2993 Arsenical pesticides, liquid, toxic, flammable	UN3051 Aluminum alkyls
UN2994 Arsenical pesticides, liquid, toxic	UN3052 Aluminum alkyl halides, liquid
UN2995 Organochlorine pesticides, liquid, toxic, flammable	UN3053 Magnesium alkyls
UN2996 Organochlorine pesticides, liquid, toxic	UN3054 Cyclohexyl mercaptan
UN2997 Triazine pesticides, liquid, toxic, flammable	UN3055 2-(2-Aminoethoxy) ethanol
UN2998 Triazine pesticides, liquid, toxic	UN3056 n-Heptaldehyde
UN3005 Thiocarbamate pesticide, liquid, toxic, flammable	UN3057 Trifluoroacetyl chloride
UN3006 Thiocarbamate pesticide, liquid, toxic	UN3064 Nitroglycerin, solution in alcohol
UN3009 Copper based pesticides, liquid, toxic, flammable	UN3065 Alcoholic beverages
UN3010 Copper based pesticides, liquid, toxic	UN3066 Paint <i>or</i> Paint related material
UN3011 Mercury based pesticides, liquid, toxic, flammable	UN3070 Ethylene oxide and dichlorodifluoromethane mixture
UN3012 Mercury based pesticides, liquid, toxic	UN3071 Mercaptans, liquid, toxic, flammable, n.o.s. <i>or</i> Mercaptan mixtures, liquid, toxic, flammable, n.o.s.
UN3013 Substituted nitrophenol pesticides, liquid, flammable	UN3072 Life-saving appliances, not self inflating
UN3014 Substituted nitrophenol pesticides, liquid, toxic	UN3073 Vinylpyridines, stabilized
UN3015 Bipyridilium pesticides, liquid, toxic, flammable	UN3076 Aluminum alkyl hydrides
	UN3077 Environmentally hazardous substances, solid, toxic, n.o.s.
	UN3078 Cerium
	UN3079 Methacrylonitrile, stabilized

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN3080 Isocyanates, toxic, flammable, n.o.s. <i>or</i> Isocyanate solutions, toxic, flammable, n.o.s.	UN3116 Organic peroxide type D, solid, temperature controlled
UN3082 Environmentally hazardous substances, liquid, n.o.s.	UN3117 Organic peroxide type E, liquid, temperature controlled
UN3083 Perchloryl fluoride	UN3118 Organic peroxide type E, solid, temperature controlled
UN3084 Corrosive solids, oxidizing, n.o.s.	UN3119 Organic peroxide type F, liquid, temperature controlled
UN3085 Oxidizing solid, corrosive, n.o.s.	UN3120 Organic peroxide type F, solid, temperature controlled
UN3086 Toxic solids, oxidizing, n.o.s.	UN3121 Oxidizing solid, water-reactive, n.o.s.
UN3087 Oxidizing solid, toxic, n.o.s.	UN3122 Toxic liquids, oxidizing, n.o.s.
UN3088 Self-heating, solid, organic, n.o.s.	UN3123 Toxic liquids, water-reactive, n.o.s.
UN3089 Metal powders, flammable, n.o.s.	UN3124 Toxic solids, self-heating, n.o.s.
UN3090 Lithium battery	UN3125 Toxic solids, water-reactive, n.o.s.
UN3091 Lithium batteries packed with equipment	UN3126 Self-heating, solid, corrosive, organic, n.o.s.
UN3091 Lithium batteries, contained in equipment	UN3127 Self-heating, solid, oxidizing, n.o.s.
UN3092 1-Methoxy-2-propanol	UN3128 Self-heating, solid, toxic, organic, n.o.s.
UN3093 Corrosive liquids, oxidizing, n.o.s.	UN3129 Water-reactive liquid, corrosive, n.o.s.
UN3094 Corrosive liquids, water-reactive, n.o.s.	UN3130 Water-reactive liquid, toxic, n.o.s.
UN3095 Corrosive solids, self-heating, n.o.s.	UN3131 Water-reactive solid, corrosive, n.o.s.
UN3096 Corrosive solids, water-reactive, n.o.s.	UN3132 Water-reactive solid, flammable, n.o.s.
UN3097 Flammable solid, oxidizing, n.o.s.	UN3133 Water-reactive solid, oxidizing, n.o.s.
UN3098 Oxidizing liquid, corrosive, n.o.s.	UN3134 Water-reactive solid, toxic, n.o.s.
UN3099 Oxidizing liquid, toxic, n.o.s.	UN3135 Water-reactive solid, self-heating, n.o.s.
UN3100 Oxidizing solid, self-heating, n.o.s.	UN3136 Trifluoromethane, refrigerated liquid
UN3101 Organic peroxide type B, liquid	UN3137 Oxidizing solid, flammable, n.o.s.
UN3102 Organic peroxide type B, solid	UN3138 Ethylene, acetylene and propylene mixtures, refrigerated liquid
UN3103 Organic peroxide type C, liquid	UN3139 Oxidizing liquid, n.o.s.
UN3104 Organic peroxide type C, solid	UN3140 Alkaloids, liquid, n.o.s. <i>or</i> Alkaloid salts, liquid, n.o.s.
UN3105 Organic peroxide type D, liquid	UN3141 Antimony compounds, inorganic, liquid, n.o.s.
UN3106 Organic peroxide type D, solid	UN3142 Disinfectants, liquid, toxic, n.o.s.
UN3107 Organic peroxide type E, liquid	UN3143 Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s.
UN3108 Organic peroxide type E, solid	UN3144 Nicotine compounds, liquid, n.o.s. <i>or</i> Nicotine preparations, liquid, n.o.s.
UN3109 Organic peroxide type F, liquid	UN3145 Alkylphenols, liquid, n.o.s.
UN3110 Organic peroxide type F, solid	UN3146 Organotin compounds, solid, n.o.s.
UN3111 Organic peroxide type B, liquid, temperature controlled	UN3147 Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s.
UN3112 Organic peroxide type B, solid, temperature controlled	UN3148 Water-reactive liquid, n.o.s.
UN3113 Organic peroxide type C, liquid, temperature controlled	
UN3114 Organic peroxide type C, solid, temperature controlled	
UN3115 Organic peroxide type D, liquid, temperature controlled	



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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN3149 Hydrogen peroxide and peroxyacetic acid mixtures, stabilized	UN3181 Metal salts of organic compounds, flammable, n.o.s.
UN3150 Devices, small, hydrocarbon gas powered Hydrocarbon gas refills for small devices	UN3182 Metal hydrides, flammable, n.o.s.
UN3151 Polyhalogenated biphenyls, liquid <i>or</i> Polyhalogenated terphenyls liquid	UN3183 Self-heating liquid, organic, n.o.s.
UN3152 Polyhalogenated biphenyls, solid <i>or</i> Polyhalogenated terphenyls, solid	UN3184 Self-heating liquid, toxic, organic, n.o.s.
UN3153 Perfluoro (methyl vinyl ether)	UN3185 Self-heating liquid, corrosive, organic, n.o.s.
UN3154 Perfluoro (ethyl vinyl ether)	UN3186 Self-heating liquid, inorganic, n.o.s.
UN3155 Pentachlorophenol	UN3187 Self-heating liquid, toxic, inorganic, n.o.s.
UN3156 Compressed gas, oxidizing, n.o.s.	UN3188 Self-heating liquid, corrosive, inorganic, n.o.s.
UN3157 Liquefied gas, oxidizing, n.o.s.	UN3189 Metal powder, self-heating, n.o.s.
UN3158 Gas, refrigerated liquid, n.o.s.	UN3190 Self-heating solid, inorganic, n.o.s.
UN3159 1,1,1,2-Tetrafluoroethane <i>or</i> Refrigerant gas R 134a	UN3191 Self-heating solid, toxic, inorganic, n.o.s.
UN3160 Liquefied gas, toxic, flammable, n.o.s.	UN3192 Self-heating solid, corrosive, inorganic, n.o.s.
UN3161 Liquefied gas, flammable, n.o.s.	UN3194 Pyrophoric liquid, inorganic, n.o.s.
UN3162 Liquefied gas, toxic, n.o.s.	UN3200 Pyrophoric solid, inorganic, n.o.s.
UN3163 Liquefied gas, n.o.s.	UN3205 Alkaline earth metal alcoholates, n.o.s.
UN3164 Articles, pressurized pneumatic <i>or</i> Hydraulic	UN3206 Alkali metal alcoholates, self-heating, corrosive, n.o.s.
UN3165 Aircraft hydraulic power unit fuel tank	UN3208 Metallic substance, water-reactive, n.o.s.
UN3166 Engines, internal combustion	UN3209 Metallic substance, water-reactive, self-heating, n.o.s.
UN3166 Vehicle, flammable gas powered	UN3210 Chlorates, inorganic, aqueous solution, n.o.s.
UN3166 Vehicle, flammable liquid powered	UN3211 Perchlorates, inorganic, aqueous solution, n.o.s.
UN3167 Gas sample, non-pressurized, flammable, n.o.s.	UN3212 Hypochlorites, inorganic, n.o.s.
UN3168 Gas sample, non-pressurized, toxic, flammable, n.o.s.	UN3213 Bromates, inorganic, aqueous solution, n.o.s.
UN3169 Gas sample, non-pressurized, toxic, n.o.s.	UN3214 Permanganates, inorganic, aqueous solution, n.o.s.
UN3170 Aluminum smelting by-products <i>or</i> Aluminum remelting by-products	UN3215 Persulfates, inorganic, n.o.s.
UN3171 Battery-powered vehicle <i>or</i> Battery-powered equipment	UN3216 Persulfates, inorganic, aqueous solution, n.o.s.
UN3172 Toxins, extracted from living sources , liquid, n.o.s.	UN3218 Nitrates, inorganic, aqueous solution, n.o.s.
UN3174 Titanium disulphide	UN3219 Nitrites, inorganic, aqueous solution, n.o.s.
UN3175 Solids containing flammable liquid, n.o.s.	UN3220 Pentafluoroethane <i>or</i> Refrigerant gas R 125
UN3176 Flammable solid, organic, molten, n.o.s.	UN3221 Self-reactive liquid type B
UN3178 Flammable solid, inorganic, n.o.s.	UN3222 Self-reactive solid type B
UN3179 Flammable solid, toxic, inorganic, n.o.s.	UN3223 Self-reactive liquid type C
UN3180 Flammable solid, corrosive, inorganic, n.o.s.	UN3224 Self-reactive solid type C
	UN3225 Self-reactive liquid type D

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN3226 Self-reactive solid type D	UN3259 Amines, solid, corrosive, n.o.s. <i>or</i> Polyamines, solid, corrosive n.o.s.
UN3227 Self-reactive liquid type E	UN3260 Corrosive solid, acidic, inorganic, n.o.s.
UN3228 Self-reactive solid type E	UN3261 Corrosive solid, acidic, organic, n.o.s.
UN3229 Self-reactive liquid type F	UN3262 Corrosive solid, basic, inorganic, n.o.s.
UN3230 Self-reactive solid type F	UN3263 Corrosive solid, basic, organic, n.o.s.
UN3231 Self-reactive liquid type B, temperature controlled	UN3264 Corrosive liquid, acidic, inorganic, n.o.s.
UN3232 Self-reactive solid type B, temperature controlled	UN3265 Corrosive liquid, acidic, organic, n.o.s.
UN3233 Self-reactive liquid type C, temperature controlled	UN3266 Corrosive liquid, basic, inorganic, n.o.s.
UN3234 Self-reactive solid type C, temperature controlled	UN3267 Corrosive liquid, basic, organic, n.o.s.
UN3235 Self-reactive liquid type D, temperature controlled	UN3268 Air bag inflators <i>or</i> Air bag modules <i>or</i> Seat-belt pretensioners
UN3236 Self-reactive solid type D, temperature controlled	UN3269 Polyester resin kit
UN3237 Self-reactive liquid type E, temperature controlled	UN3270 Nitrocellulose membrane filters
UN3238 Self-reactive solid type E, temperature controlled	UN3271 Ethers, n.o.s.
UN3239 Self-reactive liquid type F, temperature controlled	UN3272 Esters, n.o.s.
UN3240 Self-reactive solid type F, temperature controlled	UN3273 Nitriles, flammable, toxic, n.o.s.
UN3241 2-Bromo-2-nitropropane-1,3-diol	UN3274 Alcoholates solution, n.o.s.
UN3242 Azodicarbonamide	UN3275 Nitriles, toxic, flammable, n.o.s.
UN3243 Solids containing toxic liquid, n.o.s.	UN3276 Nitriles, toxic, n.o.s.
UN3244 Solids containing corrosive liquid, n.o.s.	UN3277 Chloroformates, toxic, corrosive, n.o.s.
UN3246 Methanesulfonyl chloride	UN3278 Organophosphorus compound, toxic, liquid n.o.s.
UN3247 Sodium peroxoborate, anhydrous	UN3279 Organophosphorus compound, toxic, flammable, n.o.s.
UN3248 Medicine, liquid, flammable, toxic, n.o.s.	UN3280 Organoarsenic compound, liquid n.o.s.
UN3249 Medicine, solid, toxic, n.o.s.	UN3281 Metal carbonyls, n.o.s.
UN3250 Chloroacetic acid, molten	UN3282 Organometallic compound, toxic liquid n.o.s.
UN3251 Isosorbide-5-mononitrate	UN3283 Selenium compound, solid, n.o.s.
UN3252 Difluoromethane <i>or</i> Refrigerant gas R 32	UN3284 Tellurium compound, n.o.s.
UN3253 Disodium trioxosilicate	UN3285 Vanadium compound, n.o.s.
UN3254 Tributylphosphane	UN3286 Flammable liquid, toxic, corrosive, n.o.s.
UN3255 tert-Butyl hypochlorite	UN3287 Toxic liquid, inorganic, n.o.s.
UN3256 Elevated temperature liquid, flammable, n.o.s.	UN3288 Toxic solid, inorganic, n.o.s.
UN3257 Elevated temperature liquid, n.o.s.	UN3289 Toxic liquid, corrosive, inorganic, n.o.s.
UN3258 Elevated temperature solid, n.o.s.	UN3290 Toxic solid, corrosive, inorganic, n.o.s.
	UN3291 Regulated medical waste
	UN3292 Batteries, containing sodium
	UN3292 Cells, containing sodium
	UN3293 Hydrazine, aqueous solution
	UN3294 Hydrogen cyanide, solution in alcohol
	UN3295 Hydrocarbons, liquid, n.o.s.

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UN3296 Heptafluoropropane <i>or</i> Refrigerant gas R 227	UN3331 Radioactive material, transported under special arrangement, fissile
UN3297 Ethylene oxide and chlorotetrafluoroethane mixture	UN3332 Radioactive material, Type A package, special form
UN3298 Ethylene oxide and pentafluoroethane mixture	UN3333 Radioactive material, Type A package, special form, fissile
UN3299 Ethylene oxide and tetrafluoroethane mixture	UN3334 Aviation regulated liquid, n.o.s.
UN3300 Ethylene oxide and carbon dioxide mixture	UN3335 Aviation regulated solid, n.o.s.
UN3301 Corrosive liquid, self-heating, n.o.s.	UN3336 Mercaptans, liquid, flammable, n.o.s. <i>or</i> Mercaptan mixtures, liquid, flammable, n.o.s.
UN3302 2-Dimethylaminoethyl acrylate	UN3337 Refrigerant gas R 404A
UN3303 Compressed gas, toxic, oxidizing, n.o.s.	UN3338 Refrigerant gas R 407A
UN3304 Compressed gas, toxic, corrosive, n.o.s.	UN3339 Refrigerant gas R 407B
UN3305 Compressed gas, toxic, flammable, corrosive, n.o.s.	UN3340 Refrigerant gas R 407C
UN3306 Compressed gas, toxic, oxidizing, corrosive, n.o.s.	UN3341 Thiourea dioxide
UN3307 Liquefied gas, toxic, oxidizing, n.o.s.	UN3342 Xanthates
UN3308 Liquefied gas, toxic, corrosive, n.o.s.	UN3343 Nitroglycerin mixture desensitized, liquid, flammable, n.o.s.
UN3309 Liquefied gas, toxic, flammable, corrosive, n.o.s.	UN3344 Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s.
UN3310 Liquefied gas, toxic, oxidizing, corrosive, n.o.s.	UN3345 Phenoxyacetic acid derivative pesticide, solid, toxic
UN3311 Gas, refrigerated liquid, oxidizing, n.o.s.	UN3346 Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic
UN3312 Gas, refrigerated liquid, flammable, n.o.s.	UN3347 Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable
UN3313 Organic pigments, self-heating	UN3348 Phenoxyacetic acid derivative pesticide, liquid, toxic
UN3314 Plastic molding compound	UN3349 Pyrethroid pesticide, solid, toxic
UN3316 Chemical kits <i>or</i> First aid kits	UN3350 Pyrethroid pesticide, liquid, flammable, toxic
UN3317 2-Amino-4,6-Dinitrophenol, wetted	UN3351 Pyrethroid pesticide, liquid, flammable, toxic
UN3318 Ammonia, solution	UN3352 Pyrethroid pesticide, liquid, toxic
UN3319 Nitroglycerin mixture desensitized, solid, n.o.s.	UN3354 Insecticide gases, flammable, n.o.s.
UN3320 Sodium borohydride and sodium hydroxide solution	UN3355 Insecticide gases, toxic, flammable, n.o.s.
UN3321 Radioactive material, low specific activity (LSA-II)	UN3356 Oxygen generator chemical
UN3322 Radioactive material, low specific activity (LSA-III)	UN3357 Nitroglycerin mixture, desensitized, liquid n.o.s.
UN3327 Radioactive material, Type A package, fissile	UN3358 Refrigerating machines
UN3328 Radioactive material, Type B(U) package, fissile	UN3360 Fibers, vegetable
UN3329 Radioactive material, Type B(M) package, fissile	UN3361 Chlorosilanes, toxic, corrosive, n.o.s.
	UN3362 Chlorosilanes, toxic, corrosive, flammable, n.o.s.
	UN3363 Dangerous Goods in Machinery or Dangerous Goods in Apparatus

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<b>ID NO. PROPER SHIPPING NAME</b>	<b>ID NO. PROPER SHIPPING NAME</b>
UN3364 Trinitrophenol (picric acid), wetted	UN3396 Organometallic substance, solid, water-reactive, flammable
UN3365 Trinitrobenzene (picryl chloride), wetted	UN3397 Organometallic substance, solid, water-reactive, self-heating
UN3366 Trinitrotoluene (TNT), wetted	UN3398 Organometallic substance, liquid, water-reactive
UN3367 Trinitrobenzene, wetted	UN3399 Organometallic substance, liquid, water-reactive, flammable
UN3368 Trinitrobenzoic acid, wetted	UN3400 Organometallic substance, solid, self-heating
UN3369 Sodium dinitro- <i>o</i> -cresolate, wetted	UN3401 Alkali metal amalgam, solid
UN3370 Urea nitrate, wetted	UN3402 Alkaline earth metals amalgams, solid
UN3371 2-Methylbutanal	UN3403 Potassium, metal alloys, solid
UN3375 Ammonium nitrate emulsion <i>or</i> Ammonium nitrate suspension <i>or</i> Ammonium nitrate gel	UN3404 Potassium sodium alloys, solid
UN3376 4-Nitrophenylhydrazine	UN3405 Barium chlorate, solution
UN3377 Sodium perborate monohydrate	UN3406 Barium perchlorate, solution
UN3378 Sodium carbonate peroxyhydrate	UN3407 Chlorate and magnesium chloride mixture solution
UN3379 Desensitized explosive, liquid, n.o.s.	UN3408 Lead perchlorate, solution
UN3380 Desensitized explosive, solid, n.o.s.	UN3409 Chloronitrobenzene, liquid
UN3381 Toxic by inhalation liquid, n.o.s.	UN3410 4-Chloro- <i>o</i> -toluidine hydrochloride, solution
UN3382 Toxic by inhalation liquid, n.o.s.	UN3411 beta-Naphthylamine solution
UN3383 Toxic by inhalation liquid, flammable, n.o.s.	UN3413 Potassium cyanide solution
UN3384 Toxic by inhalation liquid, flammable, n.o.s.	UN3414 Sodium cyanide solution
UN3385 Toxic by inhalation liquid, water-reactive, n.o.s.	UN3415 Sodium fluoride solution
UN3386 Toxic by inhalation liquid, water-reactive, n.o.s.	UN3416 Chloroacetophenone, liquid
UN3387 Toxic by inhalation liquid, oxidizing, n.o.s.	UN3417 Xylyl bromide, solid
UN3388 Toxic by inhalation liquid, oxidizing, n.o.s.	UN3418 2, 4-Toluylenediamine solution <i>or</i> 2, 4-Toluenediamine solution
UN3389 Toxic by inhalation liquid, corrosive, n.o.s.	UN3419 Boron trifluoride acetic acid complex, solid
UN3390 Toxic by inhalation liquid, corrosive, n.o.s.	UN3420 Boron trifluoride propionic acid complex, solid
UN3391 Organometallic substance, solid, pyrophoric	UN3421 Potassium hydrogendifluoride solution
UN3392 Organometallic substance, liquid, pyrophoric	UN3422 Potassium fluoride solution
UN3393 Organometallic substance, solid, pyrophoric, water-reactive	UN3423 Tetramethylammonium hydroxide, solid
UN3394 Organometallic substance, liquid, pyrophoric, water-reactive	UN3424 Ammonium dinitro- <i>o</i> -cresolate solution
UN3395 Organometallic substance, solid, water-reactive	UN3425 Bromoacetic acid, solid
	UN3426 Acrylamide solution
	UN3427 Chlorobenzyl chlorides, solid
	UN3428 3-Chloro-4-methylphenyl isocyanate, solid
	UN3429 Chlorotoluidines, liquid
	UN3430 Xylenols, liquid
	UN3431 Nitrobenzotrifluorides, solid
	UN3432 Polychlorinated biphenyls, solid
	UN3433 Lithium alkyls, solid

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UN3434 Nitrocresols, liquid	
UN3435 Hydroquinone solution	
UN3436 Hexafluoroacetone hydrate, solid	
UN3437 Chlorocresols, solid	
UN3438 <i>alpha</i> -Methylbenzyl alcohol, solid	
UN3439 Nitriles, toxic, solid, n.o.s.	
UN3440 Selenium compound, liquid, n.o.s.	
UN3441 Chlorodinitro-benzenes, solid	
UN3442 Dichloroanilines, solid	
UN3443 Dinitrobenzenes, solid	
UN3444 Nicotine hydrochloride, solid	
UN3445 Nicotine sulphate, solid	
UN3446 Nitrotoluenes, solid	
UN3447 Nitroxylenes, solid	
UN3448 Tear gas substance, solid, n.o.s.	
UN3449 Bromobenzyl cyanides, solid	
UN3450 Diphenyl-chloroarsine, solid	
UN3451 Toluidines, solid	
UN3452 Xylidines, solid	
UN3453 Phosphoric acid, solid	
UN3454 Dinitrotoluenes, solid	
UN3455 Cresols, solid	
UN3456 Nitrosylsulphuric acid, solid	
UN3457 Chloronitrotoluenes, solid	
UN3458 Nitroanisoles, solid	
UN3459 Nitrobromobenzenes, solid	
UN3460 N-Ethylbenzyltoluidines, solid	
UN3461 Aluminium alkyl halides, solid	
UN3462 Toxins, extracted from living source, solid, n.o.s.	
UN3464 Organophosphorus compound, toxic, solid, n.o.s.	
UN3465 Organoarsenic compound, solid, n.o.s.	
UN3466 Metal carbonyls, solid, n.o.s.	
UN3467 Organometallic compound, toxic, solid, n.o.s.	
UN3468 Hydrogen in a metal hydride storage system	

## **How to Read the FedEx Ground Hazardous Materials Table**

The FedEx Ground Hazardous Materials Table lists and classifies materials which the Department of Transportation has determined to be hazardous materials for the purposes of transportation and prescribes the requirements for shipping papers, packaging, marking, and the labeling of the hazardous materials.

The FedEx Ground Hazardous Materials Table is the focal point for determining the requirements applicable to the shipment of hazardous materials in accordance with DOT regulations and FedEx Ground requirements.

For each listed material, the Table identifies the hazard class or specifies that the material is forbidden in transportation, and gives the proper shipping name, or directs the user to the preferred shipping name. In addition, the Table specifies or references requirements in the Hazardous Materials Regulations pertaining to labeling and packaging of hazardous materials.

The FedEx Ground Hazardous Materials Table is a listing of hazardous materials which is made up of ten (10) columns:

- (1) Symbols
- (2) Hazardous Materials Descriptions and Proper Shipping Names
- (3) Hazard Class or Division
- (4) Identification Numbers
- (5) Packing Group
- (6) Label(s) Codes Required (if not exempted or excepted)
- (7) Special Provisions
- (8) Packaging Authorizations
  - (8A) Packaging Exceptions
  - (8B) Non-Bulk Packaging Requirements
- (9) FedEx Ground Restrictions

### **Column (1) Symbols**

There are six (6) symbols which may be present in the column ("+", "A", "D", "I", "G" and "W")

(1) The plus (+) sign fixes the proper shipping name, hazard class and packing group for that entry without regard to whether the material meets the definition of that class, packing group or any other hazard class definition. When the plus sign is assigned to a proper shipping name in Column (1) of the 49CFR 172.101 Table, it means that the material is known to pose a risk to humans. When a plus sign is assigned to mixtures or solutions containing a material where the hazard to humans is significantly different from that of the pure material or where no hazard to humans is posed, the material may be described using an alternative shipping name that represents the hazards posed by the material. An appropriate

alternate proper shipping name and hazard class may be authorized by the Associate Administrator .

(2) The letter **"A"** denotes a material that is subject to the requirements of this subchapter only when offered or intended for transportation by aircraft, unless the material is a hazardous substance or a hazardous waste. A shipping description entry preceded by an "A" may be used to describe a material for other modes of transportation provided all applicable requirements for the entry are met.

(3) The letter **"D"** identifies proper shipping names which are appropriate for describing materials for domestic transportation but may be inappropriate for international transportation under the provisions of international regulations (e.g., IMO, ICAO). An alternate proper shipping name may be selected when either domestic or international transportation is involved.

(4) The letter **"G"** identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description. (See 49CFR 172.203(k).)

(5) The letter **"I"** identifies proper shipping names which are appropriate for describing materials in international transportation. An alternate proper shipping name may be selected when only domestic transportation is involved.

(6) The letter **"W"** denotes a material that is subject to the requirements of this subchapter only when offered or intended for transportation by vessel, unless the material is a hazardous substance or a hazardous waste. A shipping description entry preceded by a "W" may be used to describe a material for other modes of transportation provided all applicable requirements for the entry are met.

## **Column (2) Hazardous Materials Descriptions and Proper Shipping Names**

This column lists the hazardous materials descriptions and proper shipping names of hazardous materials. Proper shipping names are limited to those shown in Roman lettering (not *italics*). Modification of a proper shipping name may be required or authorized. These modifications may be authorized when completing the documentation:

- (1) Proper shipping names may be used in the singular or plural and in either capital or lower case letters. Words may be alternatively spelled in the same manner as they appear in the ICAO Technical Instructions or the IMDG Code. For example "aluminum" may be spelled "aluminium" and "sulfur" may be spelled "sulphur". However, the word "inflammable" may not be used in place of the word "flammable"

**Example:**

Paint related material *or* PAINT RELATED MATERIAL

- (2) Punctuation marks and words in italics are not part of the proper shipping name, but may be used in addition to the proper shipping name. The word "or" in italics indicates that terms in the sequence may be used as the proper shipping name, as appropriate.

**Example:**

*Paint, including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base* (portion in italics is not necessary but may be used).

- (3) The word "poison" or "poisonous" may be used interchangeably with the word "toxic" when only domestic transportation is involved. The abbreviation "n.o.i." or "n.o.i.b.n." may be used interchangeably with "n.o.s.".
- (4) Except for hazardous wastes, when qualifying words are used as part of the proper shipping name, their sequence in the package markings and shipping paper description is optional. However, the entry in the Table reflects the preferred sequence.
- (5) When one entry references another entry by use of the word "see", if both names are in Roman type, either name may be used as the proper shipping name.

**Example:**

**Methyl alcohol, see Methanol**

- (6) When a proper shipping name includes a concentration range as part of the shipping description, the actual concentration, if it is within the range stated, may be used in place of the concentration range. For example, an aqueous solution of hydrogen peroxide containing 30 percent peroxide may be described as "Hydrogen peroxide, aqueous solution with not less than 20 percent but not more than 40 percent hydrogen peroxide" or "Hydrogen peroxide, aqueous solution with 30 percent hydrogen peroxide".
- (7) Use of the prefix "mono" is optional in any shipping name, when appropriate. Thus, Iodine monochloride may be used interchangeably with Iodine chloride. In "Glycerol alpha-monochlorohydrin" the term "mono" is considered a prefix to the term "chlorohydrin" and may be deleted.
- (8) Use of the word "liquid" or "solid". The word "liquid" or "solid" may be added to a proper shipping name when a hazardous material specifically listed by name



may, due to differing physical states, be a liquid or solid. When the packaging specified in Column 8 is inappropriate for the physical state of the material, the table provided in paragraph (i)(4) of this section should be used to determine the appropriate packaging section.

- (9) Hazardous wastes . If the word "waste" is not included in the hazardous material description in Column 2 of the Table, the proper shipping name for a hazardous waste (as defined in 49CFR 171.8 of this subchapter), shall include the word "Waste" preceding the proper shipping name of the material. For example: Waste acetone.
- (10) Mixtures and solutions
- (i) A mixture or solution not identified specifically by name, comprised of a hazardous material identified in the Table by technical name and non-hazardous material, shall be described using the proper shipping name of the hazardous material and the qualifying word "mixture" or "solution", as appropriate, unless
- (A) Except as provided in 49CFR 172.101(i)(4) the packaging specified in Column 8 is inappropriate to the physical state of the material;
  - (B) The shipping description indicates that the proper shipping name applies only to the pure or technically pure hazardous material;
  - (C) The hazard class, packing group, or subsidiary hazard of the mixture or solution is different from that specified for the entry;
  - (D) There is a significant change in the measures to be taken in emergencies;
  - (E) The material is identified by special provision in Column 7 of the 49CFR 172.101 Table as a material poisonous by inhalation; however, it no longer meets the definition of poisonous by inhalation or it falls within a different hazard zone than that specified in the special provision; or
  - (F) The material can be appropriately described by a shipping name that describes its intended application, such as "Coating solution", "Extracts, flavoring" or "Compound, cleaning liquid".
- (ii) If one or more of the conditions specified in paragraph (c)(10)(i) of this section is satisfied, then a proper shipping name shall be selected as prescribed in paragraph (c)(12)(ii) of this section.
- (iii) A mixture or solution not identified in the Table specifically by name, comprised of two or more hazardous materials in the same hazard class, shall be described using an appropriate shipping description (e.g., "Flammable liquid, n.o.s."). The name that most appropriately describes the material shall be used; e.g., an alcohol not listed by its technical name in the Table shall be described as "Alcohol, n.o.s." rather than "Flammable liquid, n.o.s.". Some mixtures may be more appropriately described according to their application, such as "Coating solution" or "Extracts, flavoring liquid" rather than by an n.o.s. entry. Under the provisions of

subparts C and D of this part, the technical names of at least two components most predominately contributing to the hazards of the mixture or solution may be required in association with the proper shipping name.

- (11) Except for a material subject to or prohibited by 49CFR 173.21, 173.54, 173.56(d), 173.56(e), 173.224(c) or 173.225(b) of this subchapter, a material that is considered to be a hazardous waste or a sample of a material for which the hazard class is uncertain and must be determined by testing may be assigned a tentative proper shipping name, hazard class, identification number and packing group, if applicable, based on the shipper's tentative determination according to:
- (i) If it is specifically determined that a material meets the definition of a hazard class, packing group or hazard zone, other than the class, packing group or hazard zone shown in association with the proper shipping name, or does not meet the defining criteria for a subsidiary hazard shown in Column 6 of the Table, the material shall be described by an appropriate proper shipping name listed in association with the correct hazard class, packing group, hazard zone, or subsidiary hazard for the material.
  - (ii) Generic or n.o.s. descriptions. If an appropriate technical name is not shown in the Table, selection of a proper shipping name shall be made from the generic or n.o.s. descriptions corresponding to the specific hazard class, packing group, hazard zone, or subsidiary hazard, if any, for the material. The name that most appropriately describes the material shall be used; e.g., an alcohol not listed by its technical name in the Table shall be described as "Alcohol, n.o.s." rather than "Flammable liquid, n.o.s.". Some mixtures may be more appropriately described according to their application, such as "Coating solution" or "Extracts, flavoring, liquid", rather than by an n.o.s. entry, such as "Flammable liquid, n.o.s." It should be noted, however, that an n.o.s. description as a proper shipping name may not provide sufficient information for shipping papers and package markings. Under the provisions of subparts C and D of this part, the technical name of one or more constituents which makes the product a hazardous material may be required in association with the proper shipping name.
  - (iii) Multiple hazard materials . If a material meets the definition of more than one hazard class, and is not identified in the Table specifically by name (e.g., acetyl chloride), the hazard class of the material shall be determined by using the precedence specified in 49CFR 173.2a of this subchapter, and an appropriate shipping description (e.g., "Flammable liquid, corrosive n.o.s.") shall be selected as described in paragraph (c)(12)(ii) of this section.
  - (iv) If it is specifically determined that a material is not a forbidden material and does not meet the definition of any hazard class, the material is not a hazardous material.
- (12) Except when the proper shipping name in the Table is preceded by a plus (+)
- (i) If it is specifically determined that a material meets the definition of a hazard class, packing group or hazard zone, other than the class, packing

- group or hazard zone shown in association with the proper shipping name, or does not meet the defining criteria for a subsidiary hazard shown in Column 6 of the Table, the material shall be described by an appropriate proper shipping name listed in association with the correct hazard class, packing group, hazard zone, or subsidiary hazard for the material.
- (ii) Generic or n.o.s. descriptions. If an appropriate technical name is not shown in the Table, selection of a proper shipping name shall be made from the generic or n.o.s. descriptions corresponding to the specific hazard class, packing group, hazard zone, or subsidiary hazard, if any, for the material. The name that most appropriately describes the material shall be used; e.g., an alcohol not listed by its technical name in the Table shall be described as "Alcohol, n.o.s." rather than "Flammable liquid, n.o.s.". Some mixtures may be more appropriately described according to their application, such as "Coating solution" or "Extracts, flavoring, liquid", rather than by an n.o.s. entry, such as "Flammable liquid, n.o.s." It should be noted, however, that an n.o.s. description as a proper shipping name may not provide sufficient information for shipping papers and package markings. Under the provisions of subparts C and D of this part, the technical name of one or more constituents which makes the product a hazardous material may be required in association with the proper shipping name.
  - (iii) Multiple hazard materials . If a material meets the definition of more than one hazard class, and is not identified in the Table specifically by name (e.g., acetyl chloride), the hazard class of the material shall be determined by using the precedence specified in 49CFR 173.2a of this subchapter, and an appropriate shipping description (e.g., "Flammable liquid, corrosive n.o.s.") shall be selected as described in paragraph (c)(12)(ii) of this section.
  - (iv) If it is specifically determined that a material is not a forbidden material and does not meet the definition of any hazard class, the material is not a hazardous material.
- (13) Self-reactive materials and organic peroxides. A generic proper shipping name for a self-reactive material or an organic peroxide, as listed in Column 2 of the Table, must be selected based on the material's technical name and concentration, in accordance with the provisions of §§ 173.224 or 173.225 of this subchapter, respectively.
  - (14) A proper shipping name that describes all isomers of a material may be used to identify any isomer of that material if the isomer meets criteria for the same hazard class or division, subsidiary risk(s) and packing group, unless the isomer is specifically identified in the Table.
  - (15) Unless a hydrate is specifically listed in the Table, a proper shipping name for the equivalent anhydrous substance may be used, if the hydrate meets the same hazard class or division, subsidiary risk(s) and packing group.

- (16) Unless it is already included in the proper shipping name in the 49CFR 172.101 Table, the qualifying words "liquid" or "solid" may be added in association with the proper shipping name when a hazardous material specifically listed by name in the 49CFR 172.101 Table may, due to the differing physical states of the various isomers of the material, be either a liquid or a solid (for example "Dinitrotoluenes, liquid" and "Dinitrotoluenes, solid"). Use of the words "liquid" or "solid" is subject to the limitations specified for the use of the words "mixture" or "solution" in paragraph (c)(10) of this section. The qualifying word "molten" may be added in association with the proper shipping name when a hazardous material, which is a solid in accordance with the definition in 49CFR 171.8 of this subchapter, is offered for transportation in the molten state (for example, "Alkylphenols, solid, n.o.s., molten").

### **Column (3) Hazard Class or Division**

Column 3: Hazard class or Division. Column 3 contains a designation of the hazard class or division corresponding to each proper shipping name, or the word "Forbidden".

- (1) A material for which the entry in this column is "Forbidden" may not be offered for transportation or transported. This prohibition does not apply if the material is diluted, stabilized or incorporated in a device and it is classed in accordance with the definitions of hazardous materials contained in part 173 of this subchapter.
- (2) When a reevaluation of test data or new data indicates a need to modify the "Forbidden" designation or the hazard class or packing group specified for a material specifically identified in the Table, this data should be submitted to the Associate Administrator.
- (3) A basic description of each hazard class and the section reference for class definitions appear in 49CFR 173.2 of this subchapter.
- (4) When an entry in this column reads "Comb liq", the material is assigned to the hazard class "Combustible liquid." Additionally, each reference to a Class 3 material is modified to read "Combustible liquid" when that material is reclassified in accordance with 49CFR 173.150(e) or (f) of this subchapter or has a flash point above 60.5 °C (141 °F) but below 93 °C (200 °F).

### **Column (4) Identification Numbers**

Identification number. Column 4 lists the identification number assigned to each proper shipping name. Those preceded by the letters "UN" are associated with proper shipping names considered appropriate for international transportation as well as domestic transportation. Those preceded by the letters "NA" are associated with proper shipping names not recognized for international transportation, except to and from Canada. Identification numbers in the "NA9000" series are associated with proper shipping names not appropriately covered by international hazardous materials (dangerous goods) transportation

standards, or not appropriately addressed by international transportation standards for emergency response information purposes, except for transportation between the United States and Canada.

## **Column (5) Packing Group**

Column 5 specifies one or more packing groups assigned to a material corresponding to the proper shipping name and hazard class for that material. Class 2, Class 7, Division 6.2 (other than regulated medical wastes), and ORM-D materials, do not have packing groups. Packing Groups I, II and III indicate the degree of danger presented by the material is either great, medium or minor, respectively. If more than one packing group is indicated for an entry, the packing group for the hazardous material is determined using the criteria for assignment of packing groups specified in subpart D of part 173. When a reevaluation of test data or new data indicates a need to modify the specified packing group(s), the data should be submitted to the Associate Administrator. Each reference in this column to a material which is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter "A" or "W", is modified to read "III" on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to requirements of this subchapter.

**Note:** If the hazardous material belongs to Class 2 (Flammable and Non-flammable gas) or Class 7 (Radioactive), there is no packing group. The shipper can either leave this space "blank" or place a "-----" or "N/A" in this column on FedEx Ground shipping papers (OP-900 and OP-950).

## **Column (6) Label Code**

Column 6 specifies codes which represent the hazard warning labels required for a package filled with a material conforming to the associated hazard class and proper shipping name, unless the package is otherwise excepted from labeling by a provision in subpart E of this part, or part 173 of this subchapter. The first code is indicative of the primary hazard of the material. Additional label codes are indicative of subsidiary hazards. Provisions in 49CFR 172.402 may require that a label other than that specified in Column 6 be affixed to the package in addition to that specified in Column 6. No label is required for a material classed as a combustible liquid or for a Class 3 material that is reclassified as a combustible liquid. For "Empty" label requirements, see 49CFR 173.428 of this subchapter. The codes contained in Column 6 are defined according to the following table:

## LABEL CODE IDENTIFICATION TABLE

<u>Hazard Class or Division</u>	<u>Label Name</u>
1.1	Explosive 1.1*
1.2	Explosive 1.2*
1.3	Explosive 1.3*
1.4	Explosive 1.4
1.5	Explosive 1.5*
1.6	Explosive 1.6
2.1	Flammable Gas
2.2	Non-Flammable Gas
2.3	Poison Gas*
3	Flammable Liquid
4.1	Flammable Solid
4.2	Spontaneously Combustible*
4.3	Dangerous When Wet*
5.1	Oxidizer
5.2	Organic Peroxide
6.1	Poison*
6.2	Infectious Substance*
7	Radioactive**
8	Corrosive
9	Class 9
* FedEx Ground prohibited hazard label.	
** FedEx Ground will only accept Radioactive White I label.	
Note: See column 9 of the table for FedEx Ground Restrictions.	

### Column (7) Special Provisions

This column contains special provisions which are contained in Section 172.102 of the Hazardous Materials Regulations. They are special instructions which are applicable to the referenced hazardous materials. Only those materials with numbers or preceded by "N" are applicable to FedEx Ground shipments.

**Note:** A list of the applicable Special Provision Codes are included in this guide starting on page 25.

### Column (8) Packaging Authorizations

This column is divided into two separate columns:

Column 8A Exceptions  
Column 8B NonBulk Packaging

Columns 8A and 8B indicate the appropriate packaging instructions as indicated in 49 CFR 173.\*\*\*. If a number appears in this column for example 150, the user is instructed to refer to 49 CFR 173.150 for specific details regarding exceptions that may be authorized for the hazardous material to which the entry corresponds. If “None” appears in column 8A, no exception apply. The material must be packaged under column 8B or if further restriction apply, column 9. Hazardous materials that are shipped under the Limited Quantity exception packaging rule in Column 8A of the FedEx Ground Hazardous Materials Table are not subject to labeling (except for 6.1 materials) and placarding requirements; although "Limited Quantity" or "Ltd. Qty." must appear on the shipping papers after the basic description. This guide has included pertinent sections of the 49 CFR for your convenience.

## Column (9) FedEx Ground Restrictions

This column identifies FedEx Ground restrictions and additional comments. The following restrictions may apply:

- **Not Accepted by FedEx Ground:** This material has been determined by FedEx Ground to pose an unreasonable risk to our employees based on the hazard associated with the material. These materials are **Not Accepted by FedEx Ground**.
- **May not be regulated via highway:** This material may not be regulated for various reasons. The material may only be regulated via vessel or aircraft only. It is the shippers responsibility to determine if their material is not regulated via FedEx Ground. Please refer to applicable sections of the 49 CFR for all hazardous materials.
- **Accepted only when package under 49 CFR §173.320:** FedEx Ground will only accept the material when packaged and prepared in accordance with 49 CFR §173.320.
- **Accepted only when packaged under applicable Special Permit or 49 CFR §173.13:** FedEx Ground will only accept these materials when packaged and prepared under one of two types of packaging methods:
  - 1) **Exception** -49 CFR §173.13: Materials may be packaged and prepared under the federal guidelines as stated in 49 CFR 173.13. FedEx Ground will know the shipper has complied with this packaging **exception** by marking the outer package as well as the shipping paper (OP-900) and certification form (OP-950) with the statement: **“This package conforms to 49CFR 173.13”**. This exception will relieve the shipper from labeling and the carrier from placarding requirements if prepared in accordance with 49 CFR 173.13.

- 2) **Special Permit**: Materials may be packaged and prepared in accordance with an authorized DOT **Special Permit**. These types of packages can be obtained through certain package suppliers or manufactures. These packages, because of their design and durability, have been granted a DOT special permit. When packaged, the shipper will be required to follow the guideline of the Special Permit as well as indicate on the shipping paper (OP-900) and certification form (OP-950) the DOT.-SP---- number. This Special Permit will relieve the shipper from labeling requirements and the carrier from placarding requirements.



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Accellerene, see p-Nitrosodimethylaniline</i>								
	<i>Accumulators, electric, see Batteries, wet etc.</i>								
	<i>Accumulators, pressurized, pneumatic or hydraulic, containing non-flammable gas, see Articles pressurized, pneumatic or hydraulic containing non-flammable gas</i>								
	<b>Acetal</b>	3	UN1088	II	FLAMMABLE LIQUID		150	202	
	<b>Acetaldehyde</b>	3	UN1089	I	FLAMMABLE LIQUID		None	201	
A	<b>Acetaldehyde ammonia</b>	9	UN1841	III	CLASS 9		155	204	May not be regulated via highway
	<b>Acetaldehyde oxime</b>	3	UN2332	III	FLAMMABLE LIQUID		150	203	
	<b>Acetic acid, glacial or Acetic acid solution, with more than 80 percent acid, by mass</b>	8 (3)	UN2789	II	CORROSIVE, FLAMMABLE LIQUID		154	202	
	<b>Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass</b>	8	UN2790	II	CORROSIVE		154	202	
	<b>Acetic acid solution, with more than 10 percent and less than 50 percent acid, by mass</b>	8	UN2790	III	CORROSIVE		154	203	
	<b>Acetic anhydride</b>	8 (3)	UN1715	II	CORROSIVE, FLAMMABLE LIQUID		154	202	
	<b>Acetone</b>	3	UN1090	II	FLAMMABLE LIQUID		150	202	
	<b>Acetone cyanohydrin, stabilized</b>	6.1	UN1541	I	POISON	2,N34	None	227	Not Accepted by FedEx Ground
	<b>Acetone oils</b>	3	UN1091	II	FLAMMABLE LIQUID		150	202	
	<b>Acetonitrile</b>	3	UN1648	II	FLAMMABLE LIQUID		150	202	
	<i>Acetyl acetone peroxide with more than 9 percent by mass active oxygen</i>	Forbid- den							
	<i>Acetyl benzoyl peroxide, solid, or with more than 40 percent in solution</i>	Forbid- den							
	<b>Acetyl bromide</b>	8	UN1716	II	CORROSIVE		154	202	
	<b>Acetyl chloride</b>	3 (8)	UN1717	II	FLAMMABLE LIQUID, CORROSIVE	N34	150	202	
	<i>Acetyl cyclohexanesulfonyl peroxide, with more than 82 percent wetted with less than 12 percent water</i>	Forbid- den							
	<i>Acetylene, dissolved</i>	2.1	UN1001		FLAMMABLE GAS		None	303	
	<b>Acetylene (liquefied)</b>	Forbid- den							
	<i>Acetylene silver nitrate</i>	Forbid- den							
	<b>Acetylene tetrabromide, see Tetrabromoethane</b>								
	<i>Acetyl iodide</i>	8	UN1898	II	CORROSIVE		154	202	
	<b>Acetyl methyl carbinol</b>	3	UN2621	III	FLAMMABLE LIQUID		150	203	
	<i>Acetyl peroxide, solid, or with more than 25 percent in solution</i>	Forbid- den							
	<b>Acid butyl phosphate, see Butyl acid phosphate</b>								
	<i>Acid, sludge, see Sludge acid</i>								
	<b>Acridine</b>	6.1	UN2713	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Acrolein dimer, stabilized</i>	3	UN2607	III	FLAMMABLE LIQUID**		150	203	Not to exceed 1 lb. (0.454kg) per package-see RQ Table
	<b>Acrolein, stabilized</b>	6.1 (3)	UN1092	I	POISON, FLAMMABLE LIQUID	1	None	226	Not Accepted by FedEx Ground
	<i>Acrylamide, solid</i>	6.1	UN2074	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Acrylamide solution</b>	6.1	UN3426	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Acrylic acid, stabilized</i>	8 (3)	UN2218	II	CORROSIVE, FLAMMABLE LIQUID		154	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Acrylonitrile, stabilized</b>	3 (6.1)	UN1093	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Actuating cartridge, explosive, see Cartridges, power device</i>								
	<b>Adhesives, containing a flammable liquid</b>	3	UN1133	I	FLAMMABLE LIQUID		150	201	
	<i>Adhesives, containing a flammable liquid</i>	3	UN1133	II	FLAMMABLE LIQUID		150	173	
	<b>Adhesives, containing a flammable liquid</b>	3	UN1133	III	FLAMMABLE LIQUID		150	173	
	<i>Adiponitrile</i>	6.1	UN2205	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Aerosols, corrosive, Packing Group II or III, (each not exceeding 1 L capacity)</b>	2.2 (8)	UN1950		NONFLAMMABLE GAS, CORROSIVE		306	None	
	<i>Aerosols, flammable, (each not exceeding 1 L capacity)</i>	2.1	UN1950		FLAMMABLE GAS	N82	306	None	
	<b>Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)</b>	2.1	UN1950		FLAMMABLE GAS	N82	306	304	
	<i>Aerosols, non-flammable, (each not exceeding 1 L capacity)</i>	2.2	UN1950		NONFLAMMABLE GAS		306	None	
	<b>Aerosols, poison, each not exceeding 1 L capacity</b>	2.2 (6.1)	UN1950		NONFLAMMABLE GAS, POISON**		306	None	Accepted only when packaged under applicable special permit or 49CFR 173.13
I	<b>Air bag inflators, or Air bag modules, or Seat-belt pretensioners</b>	1.4G	UN0503	II	EXPLOSIVE 1.4G	161	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Air bag inflators, or Air bag modules, or Seat-belt pretensioners</b>	9	UN3268	III	CLASS 9	160	166	166	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.166)
	<i>Air, compressed</i>	2.2	UN1002		NONFLAMMABLE GAS	78	306	302	
	<b>Aircraft engines (including turbines) see Engines, internal combustion</b>								
	<i>Aircraft evacuation slides, see Life saving appliances etc.</i>								
	<b>Aircraft hydraulic power unit fuel tank (containing a mixture of anhydrous hydrazine and monomethyl hydrazine) (M86 fuel)</b>	3 (6.1,8)	UN3165	I	FLAMMABLE LIQUID, POISON**, CORROSIVE		None	172	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Aircraft survival kits, see Life saving appliances etc.</i>								
	<b>Air, refrigerated liquid, (cryogenic liquid)</b>	2.2 (5.1)	UN1003		NONFLAMMABLE GAS, OXIDIZER**		320	316	Accepted only when packaged under 49CFR 173.320
	<i>Air, refrigerated liquid (cryogenic liquid) non-pressurized</i>	2.2 (5.1)	UN1003		NONFLAMMABLE GAS, OXIDIZER**		320	316	Accepted only when packaged under 49CFR 173.320
G	<b>Alcoholates solution, n.o.s., in alcohol</b>	3 (8)	UN3274	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<i>Alcoholic beverages</i>	3	UN3065	II	FLAMMABLE LIQUID**	24, 149	150	202	Accepted only intrastate when packaged under 49CFR 173.150 (c) or (d) and with specific approval through PGH Legal Department
	<b>Alcoholic beverages</b>	3	UN3065	III	FLAMMABLE LIQUID**	24,N11	150	203	Accepted only intrastate when packaged under 49CFR 173.150 (c) or (d) and with specific approval through PGH Legal Department
G	<i>Alcohols, flammable, toxic, n.o.s.</i>	3 (6.1)	UN1986	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Alcohols, flammable, toxic, n.o.s.</b>	3 (6.1)	UN1986	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<i>Alcohols, flammable, toxic, n.o.s.</i>	3 (6.1)	UN1986	III	FLAMMABLE LIQUID, POISON**		150	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Alcohols, n.o.s</b>	3	UN1987	I	FLAMMABLE LIQUID	172	None	201	
	<i>Alcohols, n.o.s</i>	3	UN1987	II	FLAMMABLE LIQUID	172	150	202	
	<b>Alcohols, n.o.s</b>	3	UN1987	III	FLAMMABLE LIQUID	172	150	203	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym- bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	<i>Aldehydes, flammable, toxic, n.o.s.</i>	3 (6.1)	UN1988	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Aldehydes, flammable, toxic, n.o.s.</b>	3 (6.1)	UN1988	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<i>Aldehydes, flammable, toxic, n.o.s.</i>	3 (6.1)	UN1988	III	FLAMMABLE LIQUID, POISON**		150	203	Accepted only when packaged under applicable special permit, 49CFR 173.13
	<b>Aldehydes, n.o.s.</b>	3	UN1989	I	FLAMMABLE LIQUID		None	201	
	<i>Aldehydes, n.o.s.</i>	3	UN1989	II	FLAMMABLE LIQUID		150	202	
	<b>Aldehydes, n.o.s.</b>	3	UN1989	III	FLAMMABLE LIQUID		150	203	
	<i>Aldol</i>	6.1	UN2839	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Alkali metal alcoholates, self-heating, corrosive, n.o.s.</b>	4.2 (8)	UN3206	II	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE	64	None	212	Not Accepted by FedEx Ground
G	<i>Alkali metal alcoholates, self-heating, corrosive, n.o.s.</i>	4.2 (8)	UN3206	III	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE	64	None	213	Not Accepted by FedEx Ground
	<b>Alkali metal alloys, liquid, n.o.s.</b>	4.3	UN1421	I	DANGEROUS WHEN WET**	N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Alkali metal amalgams, liquid</i>	4.3	UN1389	I	DANGEROUS WHEN WET**	N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Alkali metal amalgams, solid</b>	4.3	UN3401	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Alkali metal amides</i>	4.3	UN1390	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<b>Alkali metal dispersions, or Alkaline earth metal dispersions</b>	4.3	UN1391	I	DANGEROUS WHEN WET**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Alkaline corrosive liquids, n.o.s., see Caustic alkali liquids, n.o.s.</i>								
G	<b>Alkaline earth metal alcoholates, n.o.s.</b>	4.2	UN3205	II	SPONTANEOUSLY COMBUSTIBLE	65	None	212	Not Accepted by FedEx Ground
G	<i>Alkaline earth metal alcoholates, n.o.s.</i>	4.2	UN3205	III	SPONTANEOUSLY COMBUSTIBLE	65	None	213	Not Accepted by FedEx Ground
	<b>Alkaline earth metal alloys, n.o.s.</b>	4.3	UN1393	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<i>Alkaline earth metal amalgams, liquid</i>	4.3	UN1392	I	DANGEROUS WHEN WET**	N34,N40	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Alkaline earth metal amalgams, solid</b>	4.3	UN1392	I	DANGEROUS WHEN WET**	N34,N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<i>Alkaloids, liquid, n.o.s. or Alkaloid salts, liquid n.o.s.</i>	6.1	UN3140	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Alkaloids, liquid, n.o.s. or Alkaloid salts, liquid n.o.s.</b>	6.1	UN3140	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<i>Alkaloids, liquid, n.o.s. or Alkaloid salts, liquid, n.o.s.</i>	6.1	UN3140	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. poisonous</b>	6.1	UN1544	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<i>Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. poisonous</i>	6.1	UN1544	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. poisonous</b>	6.1	UN1544	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Alkylphenols, liquid, n.o.s. (including C2-C12 homologues)</i>	8	UN3145	I	CORROSIVE		None	201	
	<b>Alkylphenols, liquid, n.o.s. (including C2-C12 homologues)</b>	8	UN3145	II	CORROSIVE		154	202	
	<i>Alkylphenols, liquid, n.o.s. (including C2-C12 homologues)</i>	8	UN3145	III	CORROSIVE		154	203	
	<b>Alkylphenols, solid, n.o.s. (including C2-C12 homologues)</b>	8	UN2430	I	CORROSIVE		None	211	
	<i>Alkylphenols, solid, n.o.s. (including C2-C12 homologues)</i>	8	UN2430	II	CORROSIVE		154	212	
	<b>Alkylphenols, solid, n.o.s. (including C2-C12 homologues)</b>	8	UN2430	III	CORROSIVE		154	213	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with more than 5 percent free sulfuric acid</i>	8	UN2584	II	CORROSIVE		154	202	
	<i>Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with not more than 5 percent free sulfuric acid</i>	8	UN2586	III	CORROSIVE		154	203	
	<i>Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid, with more than 5 percent free sulfuric acid</i>	8	UN2583	II	CORROSIVE		154	212	
	<i>Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid, with not more than 5 percent free sulfuric acid</i>	8	UN2585	III	CORROSIVE		154	213	
	<i>Alkylsulfuric acids</i>	8	UN2571	II	CORROSIVE		154	202	
	<b>Allethrin, see Pesticides, liquid, toxic, n.o.s.</b>								
	<i>Allyl acetate</i>	3 (6.1)	UN2333	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Allyl alcohol</b>	6.1 (3)	UN1098	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	<i>Allylamine</i>	6.1 (3)	UN2334	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	<b>Allyl bromide</b>	3 (6.1)	UN1099	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Allyl chloride</i>	3 (6.1)	UN1100	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Allyl chlorocarbonate, see Allyl chloroformate</b>								
	<i>Allyl chloroformate</i>	6.1 (3,8)	UN1722	I	POISON, FLAMMABLE LIQUID, CORROSIVE	2,N41	None	227	Not Accepted by FedEx Ground
	<b>Allyl ethyl ether</b>	3 (6.1)	UN2335	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Allyl formate</i>	3 (6.1)	UN2336	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Allyl glycidyl ether</b>	3	UN2219	III	FLAMMABLE LIQUID		150	203	
	<i>Allyl iodide</i>	3 (8)	UN1723	II	FLAMMABLE LIQUID, CORROSIVE	N34	150	202	
	<b>Allyl isothiocyanate, stabilized</b>	6.1 (3)	UN1545	II	POISON, FLAMMABLE LIQUID**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Allyltrichlorosilane, stabilized</i>	8 (3)	UN1724	II	CORROSIVE, FLAMMABLE LIQUID	N34	None	202	
	<b>Aluminum alkyl halides, solid</b>	4.2 (4.3)	UN3461	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET	173	None	181	Not Accepted by FedEx Ground
	<i>Aluminum alkyl halides, liquid</i>	4.2 (4.3)	UN3052	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET	173	None	181	Not Accepted by FedEx Ground
	<b>Aluminum alkyl hydrides</b>	4.2 (4.3)	UN3076	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET	173	None	181	Not Accepted by FedEx Ground
	<i>Aluminum alkyls</i>	4.2 (4.3)	UN3051	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET	173	None	181	Not Accepted by FedEx Ground
	<b>Aluminum borohydride or Aluminum borohydride in devices</b>	4.2 (4.3)	UN2870	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET		None	181	Not Accepted by FedEx Ground
	<i>Aluminum bromide, anhydrous</i>	8	UN1725	II	CORROSIVE		154	212	
	<b>Aluminum bromide, solution</b>	8	UN2580	III	CORROSIVE		154	203	
	<i>Aluminum carbide</i>	4.3	UN1394	II	DANGEROUS WHEN WET**	N41	151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<b>Aluminum chloride, anhydrous</b>	8	UN1726	II	CORROSIVE		154	212	
	<i>Aluminum chloride, solution</i>	8	UN2581	III	CORROSIVE		154	203	
	<b>Aluminum dross, wet or hot</b>	Forbid- den							
	<i>Aluminum ferrosilicon powder</i>	4.3 (6.1)	UN1395	II	DANGEROUS WHEN WET, POISON**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13
	<b>Aluminum ferrosilicon powder</b>	4.3 (6.1)	UN1395	III	DANGEROUS WHEN WET, POISON**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Aluminum hydride</i>	4.3	UN2463	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	<b>Aluminum, molten</b>	9	NA9260	III	CLASS 9		None	None	Not Accepted by FedEx Ground
	<i>Aluminum nitrate</i>	5.1	UN1438	III	OXIDIZER		152	213	
	<b>Aluminum phosphate solution, see Corrosive liquids, etc.</b>								
	<i>Aluminum phosphide</i>	4.3 (6.1)	UN1397	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Aluminum phosphide pesticides</b>	6.1	UN3048	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Aluminum powder, coated</i>	4.1	UN1309	II	FLAMMABLE SOLID		151	212	
	<b>Aluminum powder, coated</b>	4.1	UN1309	III	FLAMMABLE SOLID		151	213	
	<i>Aluminum powder, uncoated</i>	4.3	UN1396	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<b>Aluminum powder, uncoated</b>	4.3	UN1396	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<i>Aluminum resinate</i>	4.1	UN2715	III	FLAMMABLE SOLID		151	213	
	<b>Aluminum silicon powder, uncoated</b>	4.3	UN1398	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<i>Aluminum smelting by-products or Aluminum remelting by-products</i>	4.3	UN3170	II	DANGEROUS WHEN WET**	128	None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Aluminum smelting by-products or Aluminum remelting by-products</b>	4.3	UN3170	III	DANGEROUS WHEN WET**	128	None	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Amatols, see Explosives, blasting, type B</i>								
G	<b>Amines, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s.</b>	3 (8)	UN2733	I	FLAMMABLE LIQUID, CORROSIVE		None	201	
G	<i>Amines, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s.</i>	3 (8)	UN2733	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
G	<b>Amines, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s.</b>	3 (8)	UN2733	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
G	<i>Amines, liquid, corrosive, flammable, n.o.s. or Polyamines, liquid, corrosive, flammable, n.o.s.</i>	8 (3)	UN2734	I	CORROSIVE, FLAMMABLE LIQUID	N34	None	201	
G	<b>Amines, liquid, corrosive, flammable, n.o.s. or Polyamines, liquid, corrosive, flammable, n.o.s.</b>	8 (3)	UN2734	II	CORROSIVE, FLAMMABLE LIQUID		None	202	
G	<i>Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s.</i>	8	UN2735	I	CORROSIVE	N34	None	201	
G	<b>Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s.</b>	8	UN2735	II	CORROSIVE		154	202	
G	<i>Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s.</i>	8	UN2735	III	CORROSIVE		154	203	
G	<b>Amines, solid, corrosive, n.o.s. or Polyamines, solid, corrosive n.o.s.</b>	8	UN3259	I	CORROSIVE		None	211	
G	<i>Amines, solid, corrosive, n.o.s. or Polyamines, solid, corrosive n.o.s.</i>	8	UN3259	II	CORROSIVE		154	212	
G	<b>Amines, solid, corrosive, n.o.s. or Polyamines, solid, corrosive n.o.s.</b>	8	UN3259	III	CORROSIVE		154	213	
	<i>2-Amino-4,6-Dinitrophenol, wetted with not less than 20 percent water by mass</i>	4.1	UN3317	I	FLAMMABLE SOLID	23, N41	None	211	
	<b>2-Amino-4-chlorophenol</b>	6.1	UN2673	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>2-Amino-5-diethylaminopentane</i>	6.1	UN2946	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>2-(2-Aminoethoxy) ethanol</b>	8	UN3055	III	CORROSIVE		154	203	
	<i>N-Aminoethylpiperazine</i>	8	UN2815	III	CORROSIVE		154	203	
+	<b>Aminophenols (o-; m-; p-)</b>	6.1	UN2512	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Aminopropylmethanamine, see Amines, etc.</i>								
	<b>n-Aminopropylmorpholine, see Amines, etc.</b>								
	<i>Aminopyridines (o-; m-; p-)</i>	6.1	UN2671	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	<b>Ammonia, anhydrous</b>	2.2	UN1005		NON-FLAMMABLE GAS	13	None	304	Not Accepted by FedEx Ground
I	<i>Ammonia, anhydrous</i>	2.3 (8)	UN1005		POISON GAS, CORROSIVE	4	None	304	Not Accepted by FedEx Ground
D	<b>Ammonia, solution relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia</b>	2.2	UN3318		NON-FLAMMABLE GAS	13	None	304	Not Accepted by FedEx Ground
I	<i>Ammonia, solution relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia</i>	2.3 (8)	UN3318		POISON GAS, CORROSIVE	4	None	304	Not Accepted by FedEx Ground
	<b>Ammonia solutions, relative density between 0.880 and 0.957 at 15 degrees C in water, with more than 10 percent but not more than 35 percent ammonia</b>	8	UN2672	III	CORROSIVE		154	203	
	<i>Ammonia solutions, relative density less than 0.880 at 15 degrees C in water, with more than 35 percent but not more than 50 percent ammonia</i>	2.2	UN2073		NONFLAMMABLE GAS		306	304	
	<b>Ammonium arsenate</b>	6.1	UN1546	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ammonium azide</i>	Forbid- den							
	<b>Ammonium bifluoride, solid, see Ammonium hydrogen difluoride, solid</b>								
	<i>Ammonium bifluoride solution, see Ammonium hydrogen difluoride, solution</i>								
	<b>Ammonium bromate</b>	Forbid- den							
	<i>Ammonium chlorate</i>	Forbid- den							
	<b>Ammonium dichromate</b>	5.1	UN1439	II	OXIDIZER**		152	212	Not to exceed 10 lb. (4.45kg) per package- see RQ Table
	<i>Ammonium dinitro-o-cresolate, solid</i>	6.1	UN1843	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Ammonium dinitro-o-cresolate, solution</b>	6.1	UN3424	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ammonium dinitro-o-cresolate, solution</i>	6.1	UN3424	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Ammonium fluoride</b>	6.1	UN2505	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ammonium fluorosilicate</i>	6.1	UN2854	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Ammonium fulminate</b>	Forbid- den							
	<i>Ammonium hydrogendifluoride, solid</i>	8	UN1727	II	CORROSIVE	N34	154	212	
	<b>Ammonium hydrogendifluoride, solution</b>	8 (6.1)	UN2817	II	CORROSIVE, POISON**	N34	154	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ammonium hydrogendifluoride, solution</i>	8 (6.1)	UN2817	III	CORROSIVE, POISON**	N3	154	203	Accepted only when packaged under applicable special permit, 49CFR 173.13
	<b>Ammonium hydrogen sulfate</b>	8	UN2506	II	CORROSIVE		154	212	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Ammonium hydrosulfide, solution, see Ammonium sulfide solution</i>								
D	<b>Ammonium hydroxide, see Ammonia solutions, etc.</b>								
	<i>Ammonium metavanadate</i>	6.1	UN2859	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Ammonium nitrate based fertilizers</b>	5.1	UN2067	III	OXIDIZER	52	152	213	
AW	<i>Ammonium nitrate based fertilizers</i>	9	UN2071	III	CLASS 9	132	155	213	May not be regulated via highway
	<b>Ammonium nitrate emulsion or Ammonium nitrate suspension or Ammonium nitrate gel, intermediate for blasting explosives</b>	5.1	UN3375	II	OXIDIZER**	147, 163	None	214	Accepted only with approval per Special Provision 147
D	<i>Ammonium nitrate-fuel oil mixture containing only prilled ammonium nitrate and fuel oil</i>	1.5D	NA0331	II	EXPLOSIVE 1.5D		None	62	Not Accepted by FedEx Ground
	<b>Ammonium nitrate, liquid (hot concentrated solution)</b>	5.1	UN2426		OXIDIZER		None	None	Not Accepted by FedEx Ground
	<i>Ammonium nitrate, with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance</i>	1.1D	UN0222	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Ammonium nitrate, with not more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance</b>	5.1	UN1942	III	OXIDIZER		152	213	
	<i>Ammonium nitrite</i>	Forbid- den							
	<b>Ammonium perchlorate</b>	1.1D	UN0402	II	EXPLOSIVE 1.1D	107	None	62	Not Accepted by FedEx Ground
	<i>Ammonium perchlorate</i>	5.1	UN1442	II	OXIDIZER	107	152	212	
	<b>Ammonium permanganate</b>	Forbid- den							
	<i>Ammonium persulfate</i>	5.1	UN1444	III	OXIDIZER		152	213	
	<b>Ammonium picrate, dry or wetted with less than 10 percent water, by mass</b>	1.1D	UN0004	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>Ammonium picrate, wetted, with not less than 10 percent water, by mass</i>	4.1	UN1310	I	FLAMMABLE SOLID**	23,N41	None	211	Not to exceed 10 lb. (4.45kg) per package- see RQ Table
	<b>Ammonium polysulfide, solution</b>	8 (6.1)	UN2818	II	CORROSIVE, POISON**		154	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ammonium polysulfide, solution</i>	8 (6.1)	UN2818	III	CORROSIVE, POISON**		154	203	Accepted only when packaged under applicable special permit, 49CFR 173.13
	<b>Ammonium polyvanadate</b>	6.1	UN2861	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ammonium silicofluoride, see Ammonium fluorosilicate</i>								
	<b>Ammonium sulfide solution</b>	8 (6.1,3)	UN2683	II	CORROSIVE, POISON, FLAMMABLE LIQUID**		154	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ammunition, blank, see Cartridges for weapons, blank</i>								
	<b>Ammunition, illuminating with or without burster, expelling charge or propelling charge</b>	1.2G	UN0171	II	EXPLOSIVE 1.2G			62	Not Accepted by FedEx Ground
	<i>Ammunition, illuminating with or without burster, expelling charge or propelling charge</i>	1.3G	UN0254	II	EXPLOSIVE 1.3G			62	Not Accepted by FedEx Ground
	<b>Ammunition, illuminating with or without burster, expelling charge or propelling charge</b>	1.4G	UN0297	II	EXPLOSIVE 1.4G			62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Ammunition, incendiary liquid or gel, with burster, expelling charge or propelling charge</i>	1.3J	UN0247	II	EXPLOSIVE 1.3J			62	Not Accepted by FedEx Ground
	<b>Ammunition, incendiary (water-activated contrivances) with burster, expelling charge or propelling charge, see Contrivances, water-activated, etc.</b>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Ammunition, incendiary, white phosphorus , with burster, expelling charge or propelling charge</i>	1.2H	UN0243	II	EXPLOSIVE 1.2H			62	Not Accepted by FedEx Ground
	<b>Ammunition, incendiary, white phosphorus, with burster, expelling charge or propelling charge</b>	1.3H	UN0244	II	EXPLOSIVE 1.3H			62	Not Accepted by FedEx Ground
	<i>Ammunition, incendiary, with or without burster, expelling charge or propelling charge</i>	1.2G	UN0009	II	EXPLOSIVE 1.2G			62	Not Accepted by FedEx Ground
	<b>Ammunition, incendiary, with or without burster, expelling charge or propelling charge</b>	1.3G	UN0010	II	EXPLOSIVE 1.3G			62	Not Accepted by FedEx Ground
	<i>Ammunition, incendiary, with burst or without burster, expelling charge or propelling charge</i>	1.4G	UN0300	II	EXPLOSIVE 1.4G			62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Ammunition, practice</b>	1.4G	UN0362	II	EXPLOSIVE 1.4G			62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Ammunition, practice</i>	1.3G	UN0488	II	EXPLOSIVE 1.3G			62	Not Accepted by FedEx Ground
	<b>Ammunition, proof</b>	1.4G	UN0363	II	EXPLOSIVE 1.4G			62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Ammunition, rocket, see Warheads, rocket etc.</i>								
	<b>Ammunition, SA (small arms), see Cartridges for weapons, etc.</b>								
	<i>Ammunition, smoke (water-activated contrivances), white phosphorus, with burster, expelling charge or propelling charge, see Contrivances, water-activated, etc. (UN 0248)</i>								
	<b>Ammunition, smoke (water-activated contrivances), without white phosphorus or phosphides, with burster, expelling charge or propelling charge, see Contrivances, water-activated, etc. (UN 0249)</b>								
	<i>Ammunition smoke, white phosphorus with burster, expelling charge, or propelling charge</i>	1.2H	UN0245	II	EXPLOSIVE 1.2H			62	Not Accepted by FedEx Ground
	<b>Ammunition smoke, white phosphorus with burster, expelling charge, or propelling charge</b>	1.3H	UN0246	II	EXPLOSIVE 1.3H			62	Not Accepted by FedEx Ground
	<i>Ammunition, smoke with or without burster, expelling charge or propelling charge</i>	1.2G	UN0015	II	EXPLOSIVE 1.2G			62	Not Accepted by FedEx Ground
	<b>Ammunition, smoke with or without burster, expelling charge or propelling charge</b>	1.3G	UN0016	II	EXPLOSIVE 1.3G			62	Not Accepted by FedEx Ground
	<i>Ammunition, smoke with or without burster, expelling charge or propelling charge</i>	1.4G	UN0303	II	EXPLOSIVE 1.4G			62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Ammunition, sporting, see Cartridges for weapons, etc. (UN 0012; UN 0328; UN 0339)</b>								
	<i>Ammunition, tear-producing, non-explosive without burster or expelling charge, non-fuzed</i>	6.1 (8)	UN2017	II	POISON, CORROSIVE**		None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Ammunition, tear-producing with burster, expelling charge or propelling charge</b>	1.2G (8,6.1)	UN0018	II	EXPLOSIVE 1.2G, CORROSIVE, POISON			62	Not Accepted by FedEx Ground
	<i>Ammunition, tear-producing with burster, expelling charge or propelling charge</i>	1.3G (8,6.1)	UN0019	II	EXPLOSIVE 1.3G, CORROSIVE, POISON			62	Not Accepted by FedEx Ground
	<b>Ammunition, tear-producing with burster, expelling charge or propelling charge</b>	1.4G (8,6.1)	UN0301	II	EXPLOSIVE 1.4G, CORROSIVE, POISON			62	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Ammunition, toxic, non-explosive , without burster or expelling charge, non-fuzed</i>	6.1	UN2016	II	POISON**		None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Ammunition, toxic (water-activated contrivances), with burster, expelling charge or propelling charge, see Contrivances, water-activated, etc.</b>								
G	<i>Ammunition, toxic with burster, expelling charge, or propelling charge</i>	1.2K (6.1)	UN0020	II	EXPLOSIVE 1.2K, POISON			62	Not Accepted by FedEx Ground
G	<b>Ammunition, toxic with burster, expelling charge, or propelling charge</b>	1.3K (6.1)	UN0021	II	EXPLOSIVE 1.3K, POISON			62	Not Accepted by FedEx Ground
	<i>Amyl acetates</i>	3	UN1104	III	FLAMMABLE LIQUID		150	203	
	<b>Amyl acid phosphate</b>	8	UN2819	III	CORROSIVE		154	203	
	<i>Amylamines</i>	3 (8)	UN1106	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>Amylamines</b>	3 (8)	UN1106	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	<i>Amyl butyrates</i>	3	UN2620	III	FLAMMABLE LIQUID		150	203	
	<b>Amyl chlorides</b>	3	UN1107	II	FLAMMABLE LIQUID		150	202	
	<i>Amyl formates</i>	3	UN1109	III	FLAMMABLE LIQUID		150	203	
	<b>Amyl mercaptans</b>	3	UN1111	II	FLAMMABLE LIQUID		None	202	
	<i>n-Amyl methyl ketone</i>	3	UN1110	III	FLAMMABLE LIQUID		150	203	
	<b>Amyl nitrate</b>	3	UN1112	III	FLAMMABLE LIQUID		150	203	
	<i>Amyl nitrites</i>	3	UN1113	II	FLAMMABLE LIQUID		150	202	
	<b>Amylrichlorosilane</b>	8	UN1728	II	CORROSIVE	N34	None	202	
	<i>Anhydrous ammonia see Ammonia, anhydrous</i>								
	<b>Anhydrous hydrofluoric acid, see Hydrogen fluoride, anhydrous</b>								
+	<i>Aniline</i>	6.1	UN1547	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Aniline hydrochloride</b>	6.1	UN1548	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Aniline oil, see Aniline</i>								
	<b>Anisidines</b>	6.1	UN2431	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Anisole</i>	3	UN2222	III	FLAMMABLE LIQUID		150	203	
	<b>Anisoyl chloride</b>	8	UN1729	II	CORROSIVE		154	212	
	<i>Anti-freeze, liquid, see Flammable liquids, n.o.s.</i>								
	<b>Antimonous chloride, see Antimony trichloride</b>								
	<i>Antimony compounds, inorganic, liquid, n.o.s.</i>	6.1	UN3141	III	POISON**	35	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Antimony compounds, inorganic, solid, n.o.s.</b>	6.1	UN1549	III	POISON**	35	153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Antimony lactate</i>	6.1	UN1550	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Antimony pentachloride, liquid</b>	8	UN1730	II	CORROSIVE		None	202	
	<i>Antimony pentachloride, solutions</i>	8	UN1731	II	CORROSIVE		154	202	
	<b>Antimony pentachloride, solutions</b>	8	UN1731	III	CORROSIVE		154	203	
	<i>Antimony pentafluoride</i>	8 (6.1)	UN1732	II	CORROSIVE, POISON**	N3, N36	None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Antimony potassium tartrate</b>	6.1	UN1551	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Antimony powder</i>	6.1	UN2871	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Antimony sulfide and a chlorate, mixtures of</b>	Forbid- den							
	<i>Antimony sulfide, solid, see Antimony compounds, inorganic, n.o.s.</i>								
	<b>Antimony trichloride, liquid</b>	8	UN1733	II	CORROSIVE		154	202	
	<i>Antimony trichloride, solid</i>	8	UN1733	II	CORROSIVE		154	212	
	<b>Aqua ammonia, see Ammonia solution, etc.</b>								
	<i>Argon, compressed</i>	2.2	UN1006		NONFLAMMABLE GAS		306	302	
	<b>Argon, refrigerated liquid (cryogenic liquid)</b>	2.2	UN1951		NONFLAMMABLE GAS**		320	316	Accepted only when packaged under exception 49CFR 173.320
	<i>Arsenic</i>	6.1	UN1558	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Arsenic acid, liquid</b>	6.1	UN1553	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<i>Arsenic acid, solid</i>	6.1	UN1554	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Arsenical dust</b>	6.1	UN1562	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenical pesticides, liquid, flammable, toxic , flash point less than 23 degrees C</i>	3 (6.1)	UN2760	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenical pesticides, liquid, flammable, toxic, flash point less than 23 degrees C</b>	3	UN2760	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenical pesticides, liquid, toxic</i>	6.1	UN2994	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenical pesticides, liquid, toxic</b>	6.1	UN2994	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenical pesticides, liquid, toxic</i>	6.1	UN2994	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenical pesticides, liquid, toxic, flammable flash point not less than 23 degrees C</b>	6.1 (3)	UN2993	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenical pesticides, liquid, toxic, flammable flash point not less than 23 degrees C</i>	6.1 (3)	UN2993	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenical pesticides, liquid, toxic, flammable flash point not less than 23 degrees C</b>	6.1 (3)	UN2993	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenical pesticides, solid, toxic</i>	6.1	UN2759	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenical pesticides, solid, toxic</b>	6.1	UN2759	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenical pesticides, solid, toxic</i>	6.1	UN2759	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenic bromide</b>	6.1	UN1555	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenic chloride, see Arsenic trichloride</i>								
	<b>Arsenic compounds, liquid, n.o.s. inorganic, including arsenates n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</b>	6.1	UN1556	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Arsenic compounds, liquid, n.o.s. inorganic, including arsenates n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>	6.1	UN1556	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenic compounds, liquid, n.o.s. inorganic, including arsenates n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</b>	6.1	UN1556	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenic compounds, solid, n.o.s. inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>	6.1	UN1557	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenic compounds, solid, n.o.s. inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</b>	6.1	UN1557	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Arsenic compounds, solid, n.o.s. inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i>	6.1	UN1557	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Arsenic pentoxide</b>	6.1	UN1559	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<i>Arsenic sulfide and a chlorate, mixtures of</i>	Forbid- den							
	<b>Arsenic trichloride</b>	6.1	UN1560	I	POISON	2	None	227	Not Accepted by FedEx Ground
	<i>Arsenic trioxide</i>	6.1	UN1561	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Arsenic, white, solid, see Arsenic trioxide</b>								
	<i>Arsenious acid, solid, see Arsenic trioxide</i>								
	<b>Arsenious and mercuric iodide solution, see Arsenic compounds, liquid, n.o.s.</b>								
	<i>Arsine</i>	2.3 (2.1)	UN2188		POISON GAS, FLAMMABLE GAS	1	None	192	Not Accepted by FedEx Ground
	<b>Articles, explosive, extremely insensitive or Articles, EEI</b>	1.6N	UN0486	II	EXPLOSIVE 1.6N	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<i>Articles, explosive, n.o.s.</i>	1.4S	UN0349	II	EXPLOSIVE 1.4S	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<b>Articles, explosive, n.o.s.</b>	1.4B	UN0350	II	EXPLOSIVE 1.4B	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<i>Articles, explosive, n.o.s.</i>	1.4C	UN0351	II	EXPLOSIVE 1.4C	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<b>Articles, explosive, n.o.s.</b>	1.4D	UN0352	II	EXPLOSIVE 1.4D	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<i>Articles, explosive, n.o.s.</i>	1.4G	UN0353	II	EXPLOSIVE 1.4G	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<b>Articles, explosive, n.o.s.</b>	1.1L	UN0354	II	EXPLOSIVE 1.1L	101	None	62	Not Accepted by FedEx Ground
G	<i>Articles, explosive, n.o.s.</i>	1.2L	UN0355	II	EXPLOSIVE 1.2L	101	None	62	Not Accepted by FedEx Ground
G	<b>Articles, explosive, n.o.s.</b>	1.3L	UN0356	II	EXPLOSIVE 1.3L	101	None	62	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	<i>Articles, explosive, n.o.s.</i>	1.1C	UN0462	II	EXPLOSIVE 1.1C	101	None	62	Not Accepted by FedEx Ground
G	<b>Articles, explosive, n.o.s.</b>	1.1D	UN0463	II	EXPLOSIVE 1.1D	101	None	62	Not Accepted by FedEx Ground
G	<i>Articles, explosive, n.o.s.</i>	1.1E	UN0464	II	EXPLOSIVE 1.1E	101	None	62	Not Accepted by FedEx Ground
G	<b>Articles, explosive, n.o.s.</b>	1.1F	UN0465	II	EXPLOSIVE 1.1F	101	None	62	Not Accepted by FedEx Ground
G	<i>Articles, explosive, n.o.s.</i>	1.2C	UN0466	II	EXPLOSIVE 1.2C	101	None	62	Not Accepted by FedEx Ground
G	<b>Articles, explosive, n.o.s.</b>	1.2D	UN0467	II	EXPLOSIVE 1.2D	101	None	62	Not Accepted by FedEx Ground
G	<i>Articles, explosive, n.o.s.</i>	1.2E	UN0468	II	EXPLOSIVE 1.2E	101	None	62	Not Accepted by FedEx Ground
G	<b>Articles, explosive, n.o.s.</b>	1.2F	UN0469	II	EXPLOSIVE 1.2F	101	None	62	Not Accepted by FedEx Ground
G	<i>Articles, explosive, n.o.s.</i>	1.3C	UN0470	II	EXPLOSIVE 1.3C	101	None	62	Not Accepted by FedEx Ground
G	<b>Articles, explosive, n.o.s.</b>	1.4E	UN0471	II	EXPLOSIVE 1.4E	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<i>Articles, explosive, n.o.s.</i>	1.4F	UN0472	II	EXPLOSIVE 1.4F	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Articles, pressurized pneumatic or Hydraulic containing non-flammable gas</b>	2.2	UN3164		NONFLAMMABLE GAS		306	302, 304	
	<i>Articles, pyrophoric</i>	1.2L	UN0380	II	EXPLOSIVE 1.2L		None	62	Not Accepted by FedEx Ground
	<b>Articles, pyrotechnic for technical purposes</b>	1.1G	UN0428	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	<i>Articles, pyrotechnic for technical purposes</i>	1.2G	UN0429	II	EXPLOSIVE 1.2G		None	62	Not Accepted by FedEx Ground
	<b>Articles, pyrotechnic for technical purposes</b>	1.3G	UN0430	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	<i>Articles, pyrotechnic for technical purposes</i>	1.4G	UN0431	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Articles, pyrotechnic for technical purposes</b>	1.4S	UN0432	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
D	<i>Asbestos</i>	9	NA2212	III	CLASS 9	156	155	216	May not be regulated via highway
	<b>Ascaridole (organic peroxide)</b>	Forbid- den							
D	<i>Asphalt, at or above its flashpoint</i>	3	NA1999	III	FLAMMABLE LIQUID		150	203	
D	<b>Asphalt, cut back, see Tars, liquid, etc.</b>								
	<i>Automobile, motorcycle, tractor, or other self-propelled vehicle, engine, or other mechanical apparatus. See Vehicles or Battery etc.</i>								
A G	<b>Aviation regulated liquid, n.o.s.</b>	9	UN3334		CLASS 9		155	204	
A G	<i>Aviation regulated solid, n.o.s.</i>	9	UN3335		CLASS 9		155	204	
	<b>Azaurolic acid (salt of) (dry)</b>	Forbid- den							
	<i>3-Azido-1,2-Propylene glycol dinitrate</i>	Forbid- den							
	<b>5-Azido-1-hydroxy tetrazole</b>	Forbid- den							
	<i>Azidodithiocarbonic acid</i>	Forbid- den							
	<b>Azidoethyl nitrate</b>	Forbid- den							
	<i>Azido guanidine picrate (dry)</i>	Forbid- den							
	<b>Azido hydroxy tetrazole (mercury and silver salts)</b>	Forbid- den							
	<i>1-Aziridinylphosphine oxide-(tris), see Tris-(1-aziridinyl) phosphine oxide, solution</i>								
	<b>Azodicarbonamide</b>	4.1	UN3242	II	FLAMMABLE SOLID	38	151	212	
	<i>Azotetrazole (dry)</i>	Forbid- den							

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Barium</b>	4.3	UN1400	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<i>Barium alloys, pyrophoric</i>	4.2	UN1854	I	SPONTANEOUSLY COMBUSTIBLE		None	181	Not Accepted by FedEx Ground
	<b>Barium azide</b> <i>dry or wetted with less than 50 percent water, by mass</i>	1.1A (6.1)	UN0224	II	EXPLOSIVE 1.1A, POISON	111, 117	None	62	Not Accepted by FedEx Ground
	<i>Barium azide, wetted with not less than 50 percent water, by mass</i>	4.1 (6.1)	UN1571	I	FLAMMABLE SOLID, POISON	162	None	182	Not Accepted by FedEx Ground
	<b>Barium bromate</b>	5.1 (6.1)	UN2719	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Barium chlorate, solid</i>	5.1 (6.1)	UN1445	II	OXIDIZER, POISON**	N34	152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Barium chlorate, solution</b>	5.1 (6.1)	UN3405	II	OXIDIZER, POISON**	N34	152	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Barium chlorate, solution</i>	5.1 (6.1)	UN3405	III	OXIDIZER, POISON**	N34	152	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Barium compounds, n.o.s.</b>	6.1	UN1564	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Barium compounds, n.o.s.</i>	6.1	UN1564	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Barium cyanide</b>	6.1	UN1565	I	POISON**	N74,N75	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	<i>Barium hypochlorite with more than 22 percent available chlorine</i>	5.1 (6.1)	UN2741	II	OXIDIZER, POISON**	N34	152	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.152
	<b>Barium nitrate</b>	5.1 (6.1)	UN1446	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Barium oxide</i>	6.1	UN1884	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Barium perchlorate, solid</b>	5.1 (6.1)	UN1447	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Barium perchlorate, solution</i>	5.1 (6.1)	UN3406	II	OXIDIZER, POISON**		152	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Barium perchlorate, solution</b>	5.1 (6.1)	UN3406	III	OXIDIZER, POISON**		152	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Barium permanganate</i>	5.1 (6.1)	UN1448	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Barium peroxide</b>	5.1 (6.1)	UN1449	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Barium selenate, see Selenates or Selenites</i>								
	<i>Barium selenite, see Selenates or Selenites</i>								
	<i>Batteries, containing sodium</i>	4.3	UN3292	II	DANGEROUS WHEN WET**		189	189	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Batteries, dry, containing potassium hydroxide solid, electric storage</b>	8	UN3028	III	CORROSIVE		None	213	
	<i>Batteries, dry, not subject to the requirements of this subchapter</i>					130			
	<b>Batteries, wet, filled with acid, electric storage</b>	8	UN2794	III	CORROSIVE		159	159	
	<i>Batteries, wet filled with alkali, electric storage</i>	8	UN2795	III	CORROSIVE		159	159	
	<b>Batteries, wet, non-spillable, electric storage</b>	8	UN2800	III	CORROSIVE		159	159	May not be regulated via highway
	<i>Battery fluid, acid</i>	8	UN2796	II	CORROSIVE	N6,N34	154	202	
	<b>Battery fluid, alkali</b>	8	UN2797	II	CORROSIVE	N6	154	202	
	<i>Battery lithium type, see Lithium batteries etc.</i>								
	<b>Battery-powered vehicle or Battery-powered equipment</b>	9	UN3171		CLASS 9	134	220	220	May not be regulated via highway

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Battery, wet, filled with acid or alkali with vehicle or mechanical equipment containing an internal combustion engine, see Vehicle, etc, or Engines, internal combustion, etc</i>								
+	<b>Benzaldehyde</b>	9	UN1990	III	CLASS 9		155	203	
	<i>Benzene</i>	3	UN1114	II	FLAMMABLE LIQUID**		150	202	Not to exceed 10 lb. (4.54kg) per package- <i>see RQ Table</i>
	<b>Benzene diazonium chloride (dry)</b>	Forbid- den							
	<i>Benzene diazonium nitrate (dry)</i>	Forbid- den							
	<b>Benzene phosphorus dichloride, see Phenyl phosphorus dichloride</b>								
	<i>Benzene phosphorus thiodichloride, see Phenyl phosphorus thiodichloride</i>								
	<b>Benzene sulfonyl chloride</b>	8	UN2225	III	CORROSIVE		154	203	
	<i>Benzenethiol, see Phenyl mercaptan</i>								
	<b>Benzene triozonide</b>	Forbid- den							
	<i>Benzidine</i>	6.1	UN1885	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- <i>see RQ Table</i>
	<b>Benzol, see Benzene</b>								
	<i>Benzonitrile</i>	6.1	UN2224	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Benzoquinone</b>	6.1	UN2587	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Benzotrichloride</i>	8	UN2226	II	CORROSIVE**		154	202	Not to exceed 10 lb. (4.54kg) per package- <i>see RQ Table</i>
	<b>Benzotrifluoride</b>	3	UN2338	II	FLAMMABLE LIQUID		150	202	
	<i>Benzoxidiazoles (dry)</i>	Forbid- den							
	<i>Benzoyl azide</i>	Forbid- den							
	<b>Benzoyl chloride</b>	8	UN1736	II	CORROSIVE		154	202	
	<b>Benzyl bromide</b>	6.1 (8)	UN1737	II	POISON, CORROSIVE**	N33,N34	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Benzyl chloride</b>	6.1 (8)	UN1738	II	POISON, CORROSIVE**	N33,N42	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Benzyl chloride, unstabilized</b>	6.1 (8)	UN1738	II	POISON, CORROSIVE**	N33, N34, N43	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Benzyl chloroformate</b>	8	UN1739	I	CORROSIVE	N41	None	201	
	<b>Benzyl dimethylamine</b>	8 (3)	UN2619	II	CORROSIVE, FLAMMABLE LIQUID		154	202	
	<b>Benzylidene chloride</b>	6.1	UN1886	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Benzyl iodide</b>	6.1	UN2653	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Beryllium compounds, n.o.s.</b>	6.1	UN1566	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Beryllium compounds, n.o.s.</b>	6.1	UN1566	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Beryllium nitrate</b>	5.1 (6.1)	UN2464	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Beryllium, powder</b>	6.1 (4.1)	UN1567	II	POISON, FLAMMABLE SOLID**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bicyclo[2,2,1]hepta-2,5-diene, stabilized or 2,5-Norbornadiene, stabilized</b>	3	UN2251	II	FLAMMABLE LIQUID		150	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Biphenyl triozone</i>	Forbid- den							
	<b>Bipyridilium pesticides, liquid, flammable, toxic, flash point less than 23 degrees C</b>	3 (6.1)	UN2782	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, liquid, flammable, toxic, flash point less than 23 degrees C</b>	3 (6.1)	UN2782	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, liquid, toxic</b>	6.1	UN3016	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, liquid, toxic</b>	6.1	UN3016	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, liquid, toxic</b>	6.1	UN3016	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C</b>	6.1 (3)	UN3015	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C</b>	6.1	UN3015	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C</b>	6.1	UN3015	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, solid, toxic</b>	6.1	UN2781	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, solid, toxic</b>	6.1	UN2781	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bipyridilium pesticides, solid, toxic</b>	6.1	UN2781	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Bis (Aminopropyl) piperazine, see Corrosive liquid, n.o.s.</i>								
	<b>Bisulfate, aqueous solution</b>	8	UN2837	II	CORROSIVE	N34	154	202	
	<b>Bisulfate, aqueous solution</b>	8	UN2837	III	CORROSIVE	N34	154	203	
	<b>Bisulfites, aqueous solutions, n.o.s.</b>	8	UN2693	III	CORROSIVE		154	203	
	<b>Black powder, compressed or Gunpowder, compressed or Black powder, in pellets or Gunpowder, in pellets</b>	1.1D	UN0028	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
D	<b>Black powder for small arms</b>	4.1	NA0027	I	FLAMMABLE SOLID	70	None	170	
	<b>Black powder or Gunpowder, granular or as a meal</b>	1.1D	UN0027	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>Blasting agent, n.o.s., see Explosives, blasting etc.</i>								
	<i>Blasting cap assemblies, see Detonator assemblies, non-electric, for blasting</i>								
	<i>Blasting caps, electric, see Detonators, electric for blasting</i>								
	<i>Blasting caps, non-electric, see Detonators, non-electric, for blasting</i>								
	<i>Bleaching powder, see Calcium hypochlorite mixtures, etc.</i>								
I	<b>Blue asbestos (Crocidolite) or Brown asbestos (amosite, mysorite)</b>	9	UN2212	II	CLASS 9	156	155	216	May not be regulated via highway
	<b>Bombs, photo-flash</b>	1.3G	UN0299	II	EXPLOSIVE 1.3G			62	Not Accepted by FedEx Ground
	<b>Bombs, photo-flash</b>	1.2G	UN0039	II	EXPLOSIVE 1.2G			62	Not Accepted by FedEx Ground
	<b>Bombs, photo-flash</b>	1.1F	UN0037	II	EXPLOSIVE 1.1F			62	Not Accepted by FedEx Ground
	<b>Bombs, photo-flash</b>	1.1D	UN0038	II	EXPLOSIVE 1.1D			62	Not Accepted by FedEx Ground
	<b>Bombs, smoke, non-explosive, with corrosive liquid, without initiating device</b>	8	UN2028	II	CORROSIVE		None	160	
	<b>Bombs, with bursting charge</b>	1.1F	UN0033	II	EXPLOSIVE 1.1F			62	Not Accepted by FedEx Ground
	<b>Bombs, with bursting charge</b>	1.1D	UN0034	II	EXPLOSIVE 1.1D			62	Not Accepted by FedEx Ground
	<b>Bombs, with bursting charge</b>	1.2D	UN0035	II	EXPLOSIVE 1.2D			62	Not Accepted by FedEx Ground

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## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Bombs, with bursting charge</b>	1.2F	UN0291	II	EXPLOSIVE 1.2F			62	Not Accepted by FedEx Ground
	<b>Bombs with flammable liquid, with bursting charge</b>	1.1J	UN0399	II	EXPLOSIVE 1.1J			62	Not Accepted by FedEx Ground
	<b>Bombs with flammable liquid, with bursting charge</b>	1.2J	UN0400	II	EXPLOSIVE 1.2J			62	Not Accepted by FedEx Ground
	<b>Boosters with detonator</b>	1.1B	UN0225	II	EXPLOSIVE 1.1B		None	62	Not Accepted by FedEx Ground
	<b>Boosters with detonator</b>	1.2B	UN0268	II	EXPLOSIVE 1.2B		None	62	Not Accepted by FedEx Ground
	<b>Boosters, without detonator</b>	1.1D	UN0042	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Boosters, without detonator</b>	1.2D	UN0283	II	EXPLOSIVE 1.2D		None	62	Not Accepted by FedEx Ground
	<i>Borate and chlorate mixtures, see Chlorate and borate mixtures</i>								
	<b>Borneol</b>	4.1	UN1312	III	FLAMMABLE SOLID		None	213	
+	<b>Boron tribromide</b>	8 (6.1)	UN2692	I	CORROSIVE, POISON	2,N34	None	227	Not Accepted by FedEx Ground
	<b>Boron trichloride</b>	2.3 (8)	UN1741		POISON GAS, CORROSIVE	3	None	304	Not Accepted by FedEx Ground
	<b>Boron trifluoride</b>	2.3	UN1008		POISON GAS	2	None	302	Not Accepted by FedEx Ground
	<b>Boron trifluoride acetic acid complex, liquid</b>	8	UN1742	II	CORROSIVE		154	202	
	<b>Boron trifluoride acetic acid complex, solid</b>	8	UN3419	II	CORROSIVE		154	212	
	<b>Boron trifluoride diethyl etherate</b>	8 (3)	UN2604	I	CORROSIVE, FLAMMABLE LIQUID		None	201	
	<b>Boron trifluoride dihydrate</b>	8	UN2851	II	CORROSIVE		154	212	
	<b>Boron trifluoride dimethyl etherate</b>	4.3 (8.3)	UN2965	I	DANGEROUS WHEN WET, CORROSIVE, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Boron trifluoride propionic acid complex, liquid</b>	8	UN1743	II	CORROSIVE		154	202	
	<b>Boron trifluoride propionic acid complex, solid</b>	8	UN3420	II	CORROSIVE		154	212	
	<i>Box toe gum, see Nitrocellulose etc.</i>								
	<b>Bromates, inorganic, aqueous solution, n.o.s.</b>	5.1	UN3213	II	OXIDIZER		152	202	
	<b>Bromates, inorganic, aqueous solution, n.o.s.</b>	5.1	UN3213	III	OXIDIZER		152	203	
	<b>Bromates, inorganic, n.o.s.</b>	5.1	UN1450	II	OXIDIZER		152	212	
+	<b>Bromine or Bromine solution</b>	8 (6.1)	UN1744	I	CORROSIVE, POISON	1,N34, N43	None	226	Not Accepted by FedEx Ground
	<i>Bromine azide</i>	Forbid- den							
	<b>Bromine chloride</b>	2.3 (8,5.1)	UN2901		POISON GAS, CORROSIVE, OXIDIZER	2	None	304	Not Accepted by FedEx Ground
+	<b>Bromine pentafluoride</b>	5.1 (6.1,8)	UN1745	I	OXIDIZER, POISON, CORROSIVE	1	None	228	Not Accepted by FedEx Ground
+	<b>Bromine trifluoride</b>	5.1 (6.1,8)	UN1746	I	OXIDIZER, POISON, CORROSIVE	2	None	228	Not Accepted by FedEx Ground
	<i>4-Bromo-1,2-dinitrobenzene</i>	Forbid- den							
	<i>4-Bromo-1,2-dinitrobenzene (unstable at 59 degrees C.)</i>	Forbid- den							
	<b>2-Bromo-2-nitropropane-1,3-diol</b>	4.1	UN3241	III	FLAMMABLE SOLID	46	151	213	Not Accepted by FedEx Ground
	<b>1-Bromo-3-chloropropane</b>	6.1	UN2688	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>1-Bromo-3-methylbutane</b>	3	UN2341	III	FLAMMABLE LIQUID		150	203	
	<i>1-Bromo-3-nitrobenzene (unstable at 56 degrees C)</i>	Forbid- den							
	<b>Bromoacetic acid, solid</b>	8	UN3425	II	CORROSIVE	N34	154	212	
	<b>Bromoacetic acid, solution</b>	8	UN1938	II	CORROSIVE		154	202	
+	<b>Bromoacetone</b>	6.1 (3)	UN1569	II	POISON, FLAMMABLE LIQUID	2	None	193	Not Accepted by FedEx Ground
	<b>Bromoacetyl bromide</b>	8	UN2513	II	CORROSIVE		154	202	
	<b>Bromobenzene</b>	3	UN2514	III	FLAMMABLE LIQUID		150	203	
	<b>Bromobenzyl cyanides, liquid</b>	6.1	UN1694	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bromobenzyl cyanides, solid</b>	6.1	UN3449	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>1-Bromobutane</b>	3	UN1126	II	FLAMMABLE LIQUID		150	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>2-Bromobutane</b>	3	UN2339	II	FLAMMABLE LIQUID		150	202	
	<b>Bromochloromethane</b>	6.1	UN1887	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>2-Bromoethyl ethyl ether</b>	3	UN2340	II	FLAMMABLE LIQUID		150	202	
	<b>Bromoform</b>	6.1	UN2515	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bromomethylpropanes</b>	3	UN2342	II	FLAMMABLE LIQUID		150	202	
	<b>2-Bromopentane</b>	3	UN2343	II	FLAMMABLE LIQUID		150	202	
	<b>Bromopropanes</b>	3	UN2344	II	FLAMMABLE LIQUID		150	202	
	<b>Bromopropanes</b>	3	UN2344	III	FLAMMABLE LIQUID		150	203	
	<b>3-Bromopropyne</b>	3	UN2345	II	FLAMMABLE LIQUID		150	202	
	<i>Bromosilane</i>	Forbid- den							
	<i>Bromotoluene-alpha, see Benzyl bromide</i>								
	<b>Bromotrifluoroethylene</b>	2.1	UN2419		FLAMMABLE GAS		None	304	
	<b>Bromotrifluoromethane or Refrigerant gas, R 13B1</b>	2.2	UN1009		NONFLAMMABLE GAS		306	304	
	<b>Brucine</b>	6.1	UN1570	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Bursters, explosive</b>	1.1D	UN0043	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Butadienes, stabilized or Butadienes and Hydrocarbon mixture, stabilized containing more than 40% butadienes</b>	2.1	UN1010		FLAMMABLE GAS		306	304	
	<i>Butane, butane mixtures and mixtures having similar properties in cartridges each not exceeding 500 grams, see Receptacles, etc.</i>								
	<b>Butanedione</b>	3	UN2346	II	FLAMMABLE LIQUID		150	202	
	<b>Butane see also Petroleum gases, liquefied</b>	2.1	UN1011		FLAMMABLE GAS	19	306	304	
	<i>1,2,4-Butanetriol trinitrate</i>	Forbid- den							
	<b>Butanols</b>	3	UN1120	II	FLAMMABLE LIQUID		150	202	
	<b>Butanols</b>	3	UN1120	III	FLAMMABLE LIQUID		150	203	
	<i>tert-Butoxycarbonyl azide</i>	Forbid- den							
	<b>5-tert-Butyl-2,4,6-trinitro-m-xylene or Musk xylene</b>	4.1	UN2956	III	FLAMMABLE SOLID	159	None	223	
	<b>Butyl acetates</b>	3	UN1123	II	FLAMMABLE LIQUID		150	202	
	<b>Butyl acetates</b>	3	UN1123	III	FLAMMABLE LIQUID		150	203	
	<b>Butyl acid phosphate</b>	8	UN1718	III	CORROSIVE		154	203	
	<b>Butyl acrylates, stabilized</b>	3	UN2348	III	FLAMMABLE LIQUID		150	203	
	<i>Butyl alcohols, see Butanols</i>								
	<b>n-Butylamine</b>	3 (8)	UN1125	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>N-Butylaniline</b>	6.1	UN2738	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Butyl benzenes</b>	3	UN2709	III	FLAMMABLE LIQUID		150	203	
	<i>n-Butyl bromide, see 1-Bromobutane</i>								
	<i>n-Butyl chloride, see Chlorobutanes</i>								
D	<b>sec-Butyl chloroformate</b>	6.1 (3,8)	NA2742	I	POISON, FLAMMABLE LIQUID, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
	<b>n-Butyl chloroformate</b>	6.1 (3,8)	UN2743	I	POISON, CORROSIVE, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	<b>tert-Butylcyclohexylchloroformate</b>	6.1	UN2747	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>1,2-Butylene oxide, stabilized</b>	3	UN3022	II	FLAMMABLE LIQUID		150	202	
	<b>Butylene see also Petroleum gases, liquefied</b>	2.1	UN1012		FLAMMABLE GAS	19	306	304	
	<i>Butyl ethers, see Dibutyl ethers</i>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Butyl ethyl ether, see Ethyl butyl ether</i>								
	<b>n-Butyl formate</b>	3	UN1128	II	FLAMMABLE LIQUID		150	202	
	<i>tert-Butyl hydroperoxide, with more than 90 percent with water</i>	Forbid- den							
	<b>tert-Butyl hypochlorite</b>	4.2 (8)	UN3255	I	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	211	Not Accepted by FedEx Ground
	<b>N-n-Butyl imidazole</b>	6.1	UN2690	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>tert-Butyl isocyanate</b>	6.1 (3)	UN2484	I	POISON, FLAMMABLE LIQUID	1	None	226	Not Accepted by FedEx Ground
	<b>n-Butyl isocyanate</b>	6.1 (3)	UN2485	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	<b>Butyl mercaptans</b>	3	UN2347	II	FLAMMABLE LIQUID		150	202	
	<b>n-Butyl methacrylate, stabilized</b>	3	UN2227	III	FLAMMABLE LIQUID		150	203	
	<b>Butyl methyl ether</b>	3	UN2350	II	FLAMMABLE LIQUID		150	202	
	<b>Butyl nitrites</b>	3	UN2351	I	FLAMMABLE LIQUID		150	201	
	<b>Butyl nitrites</b>	3	UN2351	II	FLAMMABLE LIQUID		150	202	
	<b>Butyl nitrites</b>	3	UN2351	III	FLAMMABLE LIQUID		150	203	
	<i>tert-Butyl peroxyacetate, with more than 76 percent in solution</i>	Forbid- den							
	<i>n-Butyl peroxydicarbonate, with more than 52 percent in solution</i>	Forbid- den							
	<i>tert-Butyl peroxyisobutyrate, with more than 77 percent in solution</i>	Forbid- den							
	<i>Butyl phosphoric acid, see Butyl acid phosphate</i>								
	<b>Butyl propionates</b>	3	UN1914	III	FLAMMABLE LIQUID		150	203	
	<b>Butyltoluenes</b>	6.1	UN2667	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Butyltrichlorosilane</b>	8 (3)	UN1747	II	CORROSIVE, FLAMMABLE LIQUID	N34	None	202	
	<b>Butyl vinyl ether, stabilized</b>	3	UN2352	II	FLAMMABLE LIQUID		150	202	
	<b>1,4-Butynediol</b>	6.1	UN2716	III	POISON**		None	213	
	<b>Butyraldehyde</b>	3	UN1129	II	FLAMMABLE LIQUID		150	202	
	<b>Butyraldoxime</b>	3	UN2840	III	FLAMMABLE LIQUID		150	203	
	<b>Butyric acid</b>	8	UN2820	III	CORROSIVE		154	203	
	<b>Butyric anhydride</b>	8	UN2739	III	CORROSIVE		154	203	
	<b>Butyronitrile</b>	3 (6.1)	UN2411	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Butryl chloride</b>	3 (8)	UN2353	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>Cacodylic acid</b>	6.1	UN1572	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Cadmium compounds</b>	6.1	UN2570	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Cadmium compounds</b>	6.1	UN2570	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Cadmium compounds</b>	6.1	UN2570	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Caesium hydroxide</b>	8	UN2682	II	CORROSIVE		154	212	
	<b>Caesium hydroxide solution</b>	8	UN2681	II	CORROSIVE		154	202	
	<b>Caesium hydroxide solution</b>	8	UN2681	III	CORROSIVE		154	203	
	<b>Calcium</b>	4.3	UN1401	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Calcium arsenate	6.1	UN1573	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	Calcium arsenate and calcium arsenite, mixtures, solid	6.1	UN1574	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<i>Calcium bisulfite solution, see Bisulfites, inorganic, aqueous solutions, n.o.s.</i>								
	Calcium carbide	4.3	UN1402	I	DANGEROUS WHEN WET**	N34	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Calcium carbide	4.3	UN1402	II	DANGEROUS WHEN WET**	N34	151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Calcium chlorate	5.1	UN1452	II	OXIDIZER	N34	152	212	
	Calcium chlorate aqueous solution	5.1	UN2429	II	OXIDIZER	N41	152	202	
	Calcium chlorate aqueous solution	5.1	UN2429	III	OXIDIZER	N41	152	203	
	Calcium chlorite	5.1	UN1453	II	OXIDIZER	N34	152	212	
	Calcium cyanamide with more than 0.1 percent of calcium carbide	4.3	UN1403	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	Calcium cyanide	6.1	UN1575	I	POISON**	N79,N80	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Calcium dithionite or Calcium hydrosulfite	4.2	UN1923	II	SPONTANEOUSLY COMBUSTIBLE		None	212	<b>Not Accepted by FedEx Ground</b>
	Calcium hydride	4.3	UN1404	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Calcium hydrosulfite see Calcium dithionite								
	Calcium hypochlorite, dry or Calcium hypochlorite mixtures dry with more than 39 percent available chlorine (8.8 percent available oxygen)	5.1	UN1748	II	OXIDIZER**	165,166, N34	152	212	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Calcium hypochlorite, dry or Calcium hypochlorite mixtures dry with more than 39 percent available chlorine (8.8 percent available oxygen)	5.1	UN1748	III	OXIDIZER**	165,171, N34	152	213	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Calcium hypochlorite, hydrated or Calcium hypochlorite, hydrated mixtures, with not less than 5.5 percent but not more than 16 percent water	5.1	UN2880	II	OXIDIZER**	165,166	152	212	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Calcium hypochlorite, hydrated or Calcium hypochlorite, hydrated mixtures, with not less than 5.5 percent but not more than 16 percent water	5.1	UN2880	III	OXIDIZER**	165,171	152	213	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Calcium hypochlorite mixtures, dry, with more than 10 percent but not more than 39 percent available chlorine	5.1	UN2208	III	OXIDIZER**	165,N34	152	213	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Calcium manganese silicon	4.3	UN2844	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	Calcium nitrate	5.1	UN1454	III	OXIDIZER	34	152	213	
A	Calcium oxide	8	UN1910	III	CORROSIVE		154	213	May not be regulated via highway
	Calcium perchlorate	5.1	UN1455	II	OXIDIZER		152	212	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Calcium permanganate	5.1	UN1456	II	OXIDIZER		152	212	
	Calcium peroxide	5.1	UN1457	II	OXIDIZER		152	212	
	Calcium phosphide	4.3 (6.1)	UN1360	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Calcium, pyrophoric or Calcium alloys, pyrophoric	4.2	UN1855	I	SPONTANEOUSLY COMBUSTIBLE		None	187	Not Accepted by FedEx Ground
	Calcium resinate	4.1	UN1313	III	FLAMMABLE SOLID		None	213	
	Calcium resinate, fused	4.1	UN1314	III	FLAMMABLE SOLID		None	213	
	Calcium selenate, see Selenates or Selenites								
	Calcium silicide	4.3	UN1405	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	Calcium silicide	4.3	UN1405	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	Camphor oil	3	UN1130	III	FLAMMABLE LIQUID		150	203	
	Camphor, synthetic	4.1	UN2717	III	FLAMMABLE SOLID		None	213	
	Cannon primers, see Primers, tubular								
	Caproic acid	8	UN2829	III	CORROSIVE		154	203	
	Caps, blasting, see Detonators, etc.								
	Carbamate pesticides, liquid, flammable, toxic flash point less than 23 degrees C	3 (6.1)	UN2758	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, liquid, flammable, toxic flash point less than 23 degrees C	3 (6.1)	UN2758	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, liquid, toxic	6.1	UN2992	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, liquid, toxic	6.1	UN2992	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, liquid, toxic	6.1	UN2992	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C	6.1 (3)	UN2991	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C	6.1 (3)	UN2991	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C	6.1 (3)	UN2991	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, solid, toxic	6.1	UN2757	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, solid, toxic	6.1	UN2757	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbamate pesticides, solid, toxic	6.1	UN2757	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Carbolic acid, see Phenol, solid or Phenol, molten								
	Carbolic acid solutions, see Phenol solutions								
I	Carbon, activated	4.2	UN1362	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
I	Carbon, animal or vegetable origin	4.2	UN1361	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
I	Carbon, animal or vegetable origin	4.2	UN1361	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Carbon bisulfide, see Carbon disulfide								
	Carbon dioxide	2.2	UN1013		NONFLAMMABLE GAS		306	302,304	
	Carbon dioxide and nitrous oxide mixtures	2.2	UN1015		NONFLAMMABLE GAS		306	None	
	Carbon dioxide and oxygen mixtures, compressed	2.2 (5.1)	UN1014		NONFLAMMABLE GAS,OXIDIZER	77	306	304	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Carbon dioxide, refrigerated liquid</b>	2.2	UN2187		NONFLAMMABLE GAS		306	304	
AW	<b>Carbon dioxide, solid or Dry Ice</b>	9	UN1845	III	NONE		217	217	Not regulated via highway
	<b>Carbon disulfide</b>	3 (6.1)	UN1131	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Carbon monoxide and hydrogen mixture, compressed</b>	2.3 (2.1)	UN2600		POISON GAS, FLAMMABLE GAS	6	None	302	Not Accepted by FedEx Ground
	<b>Carbon monoxide, compressed</b>	2.3 (2.1)	UN1016		POISON GAS, FLAMMABLE GAS	4	None	302	Not Accepted by FedEx Ground
D	<b>Carbon monoxide, refrigerated liquid (cryogenic liquid)</b>	2.3 (2.1)	NA9202		POISON GAS, FLAMMABLE GAS	4	None	316	Not Accepted by FedEx Ground
	<b>Carbon tetrabromide</b>	6.1	UN2516	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Carbon tetrachloride</b>	6.1	UN1846	II	POISON**	N36	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	<i>Carbonyl chloride, see Phosgene</i>								
	<b>Carbonyl fluoride, compressed</b>	2.3 (8)	UN2417		POISON GAS, CORROSIVE	2	None	302	Not Accepted by FedEx Ground
	<b>Carbonyl sulfide</b>	2.3 (2.1)	UN2204		POISON GAS, FLAMMABLE GAS	3	None	304	Not Accepted by FedEx Ground
	<i>Cartridge cases, empty primed, see Cases, cartridge, empty, with primer</i>								
	<i>Cartridges, actuating, for aircraft ejector seat catapult, fire extinguisher, canopy removal or apparatus, see Cartridges, power device</i>								
	<i>Cartridges, explosive, see Charges, demolition</i>								
	<b>Cartridges, flash</b>	1.3G	UN0050	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	<b>Cartridges, flash</b>	1.1G	UN0049	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, blank</b>	1.1C	UN0326	II	EXPLOSIVE 1.1C		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, blank</b>	1.2C	UN0413	II	EXPLOSIVE 1.2C		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, blank or Cartridges, small arms blank</b>	1.4S	UN0014	II	NONE		63	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Cartridges for weapons, blank or Cartridges, small arms blank</b>	1.3C	UN0327	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, blank or Cartridges, small arms blank</b>	1.4C	UN0338	II	EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Cartridges for weapons, inert projectile</b>	1.2C	UN0328	II	EXPLOSIVE 1.2C		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, inert projectile or Cartridges, small arms</b>	1.4S	UN0012	II	NONE		63	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Cartridges for weapons, inert projectile or Cartridges, small arms</b>	1.4C	UN0339	II	EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Cartridges for weapons, inert projectile or Cartridges, small arms</b>	1.3C	UN0417	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, with bursting charge</b>	1.1F	UN0005	II	EXPLOSIVE 1.1F		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, with bursting charge</b>	1.1E	UN0006	II	EXPLOSIVE 1.1E		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, with bursting charge</b>	1.2F	UN0007	II	EXPLOSIVE 1.2F		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, with bursting charge</b>	1.2E	UN0321	II	EXPLOSIVE 1.2E		None	62	Not Accepted by FedEx Ground
	<b>Cartridges for weapons, with bursting charge</b>	1.4F	UN0348	II	EXPLOSIVE 1.4F		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Cartridges for weapons, with bursting charge</b>	1.4E	UN0412	II	EXPLOSIVE 1.4E		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Cartridges, oil well	1.3C	UN0277	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Cartridges, oil well	1.4C	UN0278	II	EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Cartridges, power device	1.3C	UN0275	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Cartridges, power device	1.4C	UN0276	II	EXPLOSIVE 1.4C	110	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Cartridges, power device	1.2C	UN0381	II	EXPLOSIVE 1.2C		None	62	Not Accepted by FedEx Ground
	Cartridges, power device	1.4S	UN0323	II	EXPLOSIVE 1.4S	110	63	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
D	Cartridges power device (used to project fastening devices)	ORM-D			NONE		63	None	
	Cartridges, safety, blank, see Cartridges for weapons, blank (UN 0014)								
	Cartridges, safety, see Cartridges for weapons, other than blank or Cartridges, power device (UN 0323)								
	Cartridges, signal	1.4S	UN0405	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Cartridges, signal	1.3G	UN0054	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	Cartridges, signal	1.4G	UN0312	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
D	Cartridges, small arms	ORM-D			NONE		63	None	See this section in the guide
	Cartridges, sporting, see Cartridges for weapons, other than blank								
	Cartridges, starter, jet engine, see Cartridges, power device								
	Cases, cartridge, empty with primer	1.4S	UN0055	II	EXPLOSIVE 1.4S	50	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Cases, cartridges, empty with primer	1.4C	UN0379	II	EXPLOSIVE 1.4C	50	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Cases, combustible, empty, without primer	1.4C	UN0446	II	EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Cases, combustible, empty, without primer	1.3C	UN0447	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Casinghead gasoline see Gasoline								
AW	Castor beans or Castor meal or Castor pomace or Castor flake	9	UN2969	II	NONE		155	204	May not be regulated via highway
G	Caustic alkali liquids, n.o.s.	8	UN1719	II	CORROSIVE		154	202	
G	Caustic alkali liquids, n.o.s.	8	UN1719	III	CORROSIVE		154	203	
	Caustic potash, see Potassium hydroxide etc.								
	Caustic soda, (etc.) see Sodium hydroxide etc.								
	Cells, containing sodium	4.3	UN3292	II	DANGEROUS WHEN WET		189	189	Not Accepted by FedEx Ground
	Celluloid, in block, rods, rolls, sheets, tubes, etc., except scrap	4.1	UN2000	III	FLAMMABLE SOLID		None	213	
	Celluloid, scrap	4.2	UN2002	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Cement, see Adhesives containing flammable liquid								
	Cerium, slabs, ingots, or rods	4.1	UN1333	II	FLAMMABLE SOLID	N34	None	212	
	Cerium, turnings or gritty powder	4.3	UN3078	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym- bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Cesium nitrate <i>or</i> Caesium nitrate	5.1	UN1451	III	OXIDIZER		152	213	
	Cesium <i>or</i> Caesium	4.3	UN1407	I	DANGEROUS WHEN WET**	N34,N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	Charcoal <i>briquettes, shell, screenings, wood, etc.</i>	4.2	NA1361	III	SPONTANEOUSLY COMBUSTIBLE		151	213	Accepted only packaged under 49CFR 173.151
	Charges, bursting, plastics bonded	1.1D	UN0457	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Charges, bursting, plastics bonded	1.2D	UN0458	II	EXPLOSIVE 1.2D		None	62	Not Accepted by FedEx Ground
	Charges, bursting, plastics bonded	1.4D	UN0459	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Charges, bursting, plastics bonded	1.4S	UN0460	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Charges, demolition	1.1D	UN0048	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Charges, depth	1.1D	UN0056	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Charges, <i>expelling, explosive, for fire extinguishers, see Cartridges, power device</i>								
	Charges, explosive, commercial <i>without detonator</i>	1.1D	UN0442	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Charges, explosive, commercial <i>without detonator</i>	1.2D	UN0443	II	EXPLOSIVE 1.2D		None	62	Not Accepted by FedEx Ground
	Charges, explosive, commercial <i>without detonator</i>	1.4D	UN0444	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Charges, explosive, commercial <i>without detonator</i>	1.4S	UN0445	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	Charges, propelling	1.1C	UN0271	II	EXPLOSIVE 1.1C		None	62	Not Accepted by FedEx Ground
G	Charges, propelling	1.3C	UN0272	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
G	Charges, propelling	1.2C	UN0415	II	EXPLOSIVE 1.2C		None	62	Not Accepted by FedEx Ground
G	Charges, propelling	1.4C	UN0491	II	EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Charges, propelling, for cannon	1.3C	UN0242	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Charges, propelling, for cannon	1.1C	UN0279	II	EXPLOSIVE 1.1C		None	62	Not Accepted by FedEx Ground
	Charges, propelling, for cannon	1.2C	UN0414	II	EXPLOSIVE 1.2C		None	62	Not Accepted by FedEx Ground
	Charges, shaped, flexible, linear	1.4D	UN0237	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Charges, shaped, flexible, linear	1.1D	UN0288	II	EXPLOSIVE 1.1D	101	None	62	Not Accepted by FedEx Ground
	Charges, shaped, <i>without detonator</i>	1.4S	UN0441	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Charges, shaped, <i>without detonator</i>	1.1D	UN0059	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Charges, shaped, <i>without detonator</i>	1.2D	UN0439	II	EXPLOSIVE 1.2D		None	62	Not Accepted by FedEx Ground
	Charges, shaped, <i>without detonator</i>	1.4D	UN0440	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Charges, supplementary explosive	1.1D	UN0060	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
D	Chemical kit	8	NA1760	II	CORROSIVE		154	161	
	Chemical kits	9	UN3316		CLASS 9	15	161	161	See Special Provision 15
	Chloral, anhydrous, stabilized	6.1	UN2075	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorate and borate mixtures	5.1	UN1458	II	OXIDIZER	N34	152	212	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Chlorate and borate mixtures	5.1	UN1458	III	OXIDIZER	N34	152	213	
	Chlorate and magnesium chloride mixtures solid	5.1	UN1459	II	OXIDIZER	N34	152	212	
	Chlorate and magnesium chloride mixtures solid	5.1	UN1459	III	OXIDIZER	N34	152	213	
	Chlorate and magnesium chloride mixtures solution	5.1	UN3407	II	OXIDIZER	N34	152	202	
	Chlorate and magnesium chloride mixtures solution	5.1	UN3407	III	OXIDIZER	N34	152	203	
	<i>Chlorate of potash, see Potassium chlorate</i>								
	<i>Chlorate of soda, see Sodium chlorate</i>								
	Chlorates, inorganic, aqueous solution, n.o.s.	5.1	UN3210	II	OXIDIZER		152	202	
	Chlorates, inorganic, aqueous solution, n.o.s.	5.1	UN3210	III	OXIDIZER		152	203	
	Chlorates, inorganic, n.o.s.	5.1	UN1461	II	OXIDIZER	N34	152	212	
	Chloric acid aqueous solution, with not more than 10 percent chloric acid	5.1	UN2626	II	OXIDIZER		None	229	Not Accepted by FedEx Ground
	<i>Chloride of phosphorus, see Phosphorus trichloride</i>								
	<i>Chloride of sulfur, see Sulfur chloride</i>								
	<i>Chlorinated lime, see Calcium hypochlorite mixtures, etc.</i>								
	Chlorine	2.3 (8)	UN1017		POISON GAS, CORROSIVE	2	None	304	Not Accepted by FedEx Ground
	<i>Chlorine azide</i>	Forbid- den							
D	Chlorine dioxide, hydrate, frozen	5.1 (6.1)	NA9191	II	OXIDIZER, POISON		None	229	Not Accepted by FedEx Ground
	<i>Chlorine dioxide (not hydrate)</i>	Forbid- den							
	Chlorine pentafluoride	2.3 (5.1,8)	UN2548		POISON GAS, OXIDIZER, CORROSIVE	1	None	304	Not Accepted by FedEx Ground
	Chlorine trifluoride	2.3 (5.1,8)	UN1749		POISON GAS, OXIDIZER, CORROSIVE	2	None	304	Not Accepted by FedEx Ground
	Chlorites, inorganic, n.o.s.	5.1	UN1462	II	OXIDIZER	N34	152	212	
	Chlorite solution	8	UN1908	II	CORROSIVE	N34	154	202	
	Chlorite solution	8	UN1908	III	CORROSIVE	N34	154	203	
	1-Chloro-1,1-difluoroethane or Refrigerant gas R 142B	2.1	UN2517		FLAMMABLE GAS		306	304	
	1-Chloro-1,2,2,2-tetrafluoroethane or Refrigerant gas R 124	2.2	UN1021		NONFLAMMABLE GAS		306	304	
	1-Chloro-2,2,2-trifluoroethane or Refrigerant gas R 133a	2.2	UN1983		NONFLAMMABLE GAS		306	304	
	3-Chloro-4-methylphenyl isocyanate, liquid	6.1	UN2236	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	3-Chloro-4-methylphenyl isocyanate, solid	6.1	UN3428	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloroacetic acid, molten	6.1 (8)	UN3250	II	POISON, CORROSIVE		None	202	Not Accepted by FedEx Ground
	Chloroacetic acid, solid	6.1 (8)	UN1751	II	POISON, CORROSIVE**	N34	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloroacetic acid, solution	6.1 (8)	UN1750	II	POISON, CORROSIVE**	N34	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloroacetone, stabilized	6.1 (3,8)	UN1695	I	POISON, FLAMMABLE LIQUID, CORROSIVE	2, N12, N32, N34	None	227	Not Accepted by FedEx Ground
	<i>Chloroacetone (unstabilized)</i>	Forbid- den							
+	Chloroacetonitrile	6.1 (3)	UN2668	II	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	Chloroacetophenone, CN, liquid	6.1	UN3416	II	POISON**	N12, N32, N33, N34	None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloroacetophenone, CN, solid	6.1	UN1697	II	POISON**	N12, N32, N33, N34	None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloroacetophenone, liquid CN	6.1	UN3416	II	POISON**	N12, N32, N33	None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloroacetophenone, solid (CN)	6.1	UN1697	II	POISON**	N12, N32, N33, N34	None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Chloroacetyl chloride	6.1 (8)	UN1752	I	POISON, CORROSIVE	2, N34, N43	None	227	<b>Not Accepted by FedEx Ground</b>
	Chloroanilines, liquid	6.1	UN2019	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloroanilines, solid	6.1	UN2018	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloroanisidines	6.1	UN2233	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorobenzene	3	UN1134	III	FLAMMABLE LIQUID		150	203	
	<i>Chlorobenzol, see Chlorobenzene</i>								
	Chlorobenzotrifluorides	3	UN2234	III	FLAMMABLE LIQUID		150	203	
	Chlorobenzyl chlorides, liquid	6.1	UN2235	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorobenzyl chlorides, solid	6.1	UN3427	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorobutanes	3	UN1127	II	FLAMMABLE LIQUID		150	202	
	Chlorocresols, <i>solid</i>	6.1	UN3437	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorocresols solution	6.1	UN2669	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorocresols solution	6.1	UN2669	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorodifluorobromomethane <i>or</i> Refrigerant gas R 12B1	2.2	UN1974		NONFLAMMABLE GAS		306	304	
	Chlorodifluoromethane and chloropentafluoroethane mixture <i>or</i> Refrigerant gas R 502 <i>with fixed boiling point, with approximately 49 percent chlorodifluoromethane</i>	2.2	UN1973		NONFLAMMABLE GAS		306	304	
	Chlorodifluoromethane <i>or</i> Refrigerant gas R 22	2.2	UN1018		NONFLAMMABLE GAS		306	304	
+	Chlorodinitrobenzenes, liquid	6.1	UN1577	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorodinitro-benzenes, solid	6.1	UN3441	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Chlorodinitrobenzenes, solid	6.1	UN3441	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	2-Chloroethanal	6.1	UN2232	I	POISON	2	None	227	<b>Not Accepted by FedEx Ground</b>
	Chloroform	6.1	UN1888	III	POISON**	N36	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
G	Chloroformates, toxic, corrosive, flammable, n.o.s.	6.1 (8,3)	UN2742	II	POISON, CORROSIVE, FLAMMABLE LIQUID**	5	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Chloroformates, toxic, corrosive, n.o.s.	6.1 (8)	UN3277	II	POISON, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloromethyl chloroformate	6.1 (8)	UN2745	II	POISON, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloromethyl ethyl ether	3 (6.1)	UN2354	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	Chloronitroanilines	6.1	UN2237	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Chloronitrobenzene, liquid <i>ortho</i>	6.1	UN3409	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Chloronitrobenzenes, solid <i>meta or para, solid</i>	6.1	UN1578	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Chloronitrotoluenes, <i>liquid</i>	6.1	UN2433	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloronitrotoluenes, <i>solid</i>	6.1	UN3457	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	4-Chloro-o-toluidine hydrochloride, <i>solid</i>	6.1	UN1579	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	4-Chloro-o-toluidine hydrochloride, <i>solution</i>	6.1	UN3410	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloropentafluoroethane <i>or</i> Refrigerant gas R 115	2.2	UN1020		NONFLAMMABLE GAS		306	304	
	Chlorophenolates, <i>liquid or Phenolates, liquid</i>	8	UN2904	III	CORROSIVE		154	203	
	Chlorophenolates, <i>solid or Phenolates, solid</i>	8	UN2905	III	CORROSIVE		154	213	
	Chlorophenols, <i>liquid</i>	6.1	UN2021	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorophenols, <i>solid</i>	6.1	UN2020	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorophenyltrichlorosilane	8	UN1753	II	CORROSIVE	N34	None	202	
+	Chloropicrin	6.1	UN1580	I	POISON	2	None	227	Not Accepted by FedEx Ground
	Chloropicrin and methyl bromide mixtures	2.3	UN1581		POISON GAS	2	None	193	Not Accepted by FedEx Ground
	Chloropicrin and methyl chloride mixtures	2.3	UN1582		POISON GAS	2	None	193	Not Accepted by FedEx Ground
	<i>Chloropicrin mixture, flammable (pressure not exceeding 14.7 psia at 115 degrees F flash point below 100 degrees F) see Toxic liquids, flammable, etc.</i>								
	Chloropicrin mixtures, <i>n.o.s.</i>	6.1	UN1583	I	POISON**	5	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloropicrin mixtures, <i>n.o.s.</i>	6.1	UN1583	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chloropicrin mixtures, <i>n.o.s.</i>	6.1	UN1583	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	Chloropivaloyl chloride	6.1 (8)	NA9263	I	POISON, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
	Chloroplatinic acid, <i>solid</i>	8	UN2507	III	CORROSIVE		154	213	
	Chloroprene, <i>stabilized</i>	3 (6.1)	UN1991	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Chloroprene, uninhibited</i>	Forbid- den							
	1-Chloropropane	3	UN1278	II	FLAMMABLE LIQUID	N34	None	202	
	2-Chloropropane	3	UN2356	I	FLAMMABLE LIQUID	N36	150	201	
	3-Chloropropanol-1	6.1	UN2849	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	2-Chloropropene	3	UN2456	I	FLAMMABLE LIQUID	N36	150	201	
	2-Chloropropionic acid	8	UN2511	III	CORROSIVE		154	203	
	2-Chloropyridine	6.1	UN2822	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorosilanes, <i>corrosive, flammable, n.o.s.</i>	8 (3)	UN2986	II	CORROSIVE, FLAMMABLE LIQUID		None	202	
	Chlorosilanes, <i>corrosive, n.o.s.</i>	8	UN2987	II	CORROSIVE		154	202	
	Chlorosilanes, <i>flammable, corrosive, n.o.s.</i>	3 (8)	UN2985	II	FLAMMABLE LIQUID, CORROSIVE		150	201	
	Chlorosilanes, <i>toxic, corrosive, flammable, n.o.s.</i>	6.1 (3,8)	UN3362	II	POISON, FLAMMABLE LIQUID, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorosilanes, <i>toxic, corrosive, n.o.s.</i>	6.1 (8)	UN3361	II	POISON, CORROSIVE		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorosilanes, <i>water-reactive, flammable, corrosive, n.o.s.</i>	4.3 (3,8)	UN2988	I	DANGEROUS WHEN WET, FLAMMABLE LIQUID, CORROSIVE**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Chlorosulfonic acid ( <i>with or without sulfur trioxide</i> )	8 (6.1)	UN1754	I	CORROSIVE, POISON	2	None	227	Not Accepted by FedEx Ground
	Chlorotoluenes	3	UN2238	III	FLAMMABLE LIQUID		150	203	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Chlorotoluidines, liquid	6.1	UN3429	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorotoluidines, solid	6.1	UN2239	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Chlorotrifluoromethane and trifluoromethane azeotropic mixture or Refrigerant gas R 503 with approximately 60 percent chlorotrifluoromethane	2.2	UN2599		NONFLAMMABLE GAS		306	304	
	Chlorotrifluoromethane or Refrigerant gas R 13	2.2	UN1022		NONFLAMMABLE GAS		306	304	
	Chromic acid solution	8	UN1755	II	CORROSIVE		154	202	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Chromic acid solution	8	UN1755	III	CORROSIVE		154	203	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Chromic anhydride, see Chromium trioxide, anhydrous								
	Chromic fluoride, solid	8	UN1756	II	CORROSIVE		154	212	
	Chromic fluoride, solution	8	UN1757	II	CORROSIVE		154	202	
	Chromic fluoride, solution	8	UN1757	III	CORROSIVE		154	203	
	Chromium nitrate	5.1	UN2720	III	OXIDIZER		152	213	
	Chromium oxychloride	8	UN1758	I	CORROSIVE	N34	None	201	
	Chromium trioxide, anhydrous	5.1 (8)	UN1463	II	OXIDIZER, CORROSIVE		None	212	
	Chromosulfuric acid	8	UN2240	I	CORROSIVE	N34	None	201	
	Chromyl chloride, see Chromium oxychloride								
	Cigar and cigarette lighters, charged with fuel, see Lighters or Lighter refills containing flammable gas								
	Coal briquettes, hot	Forbid- den							
	Coal gas, compressed	2.3 (2.1)	UN1023		POISON GAS, FLAMMABLE GAS	3	None	302	Not Accepted by FedEx Ground
	Coal tar distillates, flammable	3	UN1136	II	FLAMMABLE LIQUID		150	202	
	Coal tar distillates, flammable	3	UN1136	III	FLAMMABLE LIQUID		150	203	
	Coal tar dye, corrosive, liquid, n.o.s. see Dyes, liquid or solid, n.o.s. or Dye intermediates, liquid or solid, corrosive, n.o.s.								
	Coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)	3	UN1139	I	FLAMMABLE LIQUID		150	201	
	Coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)	3	UN1139	II	FLAMMABLE LIQUID		150	202	
	Coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)	3	UN1139	III	FLAMMABLE LIQUID		150	203	
	Cobalt naphthenates, powder	4.1	UN2001	III	FLAMMABLE SOLID		151	213	
	Cobalt resinate, precipitated	4.1	UN1318	III	FLAMMABLE SOLID		151	213	
	Coke, hot	Forbid- den							
	Collodion, see Nitrocellulose, etc.								
D,G	Combustible liquid, n.o.s.	Com-bustible liquid	NA1993	III	NONE		150	203	May not be regulated via highway
G	Components, explosive train, n.o.s.	1.2B	UN0382	II	EXPLOSIVE 1.2B	101	None	62	Not Accepted by FedEx Ground
G	Components, explosive train, n.o.s.	1.4B	UN0383	II	EXPLOSIVE 1.4B	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym- bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Components, explosive train, n.o.s.	1.4S	UN0384	II	EXPLOSIVE 1.4S	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	Components, explosive train, n.o.s. <i>Composition B, see Hexolite, etc.</i>	1.1B	UN0461	II	EXPLOSIVE 1.1B	101	None	62	Not Accepted by FedEx Ground
D,G	Compounds, cleaning liquid	8	NA1760	I	CORROSIVE		None	201	
D,G	Compounds, cleaning liquid	8	NA1760	II	CORROSIVE	N37	154	202	
D,G	Compounds, cleaning liquid	8	NA1760	III	CORROSIVE	N37	154	203	
D,G	Compounds, cleaning liquid	3	NA1993	I	FLAMMABLE LIQUID		150	201	
D,G	Compounds, cleaning liquid	3	NA1993	II	FLAMMABLE LIQUID		150	202	
D,G	Compounds, cleaning liquid	3	NA1993	III	FLAMMABLE LIQUID		150	203	
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	8	NA1760	I	CORROSIVE		None	201	
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	8	NA1760	II	CORROSIVE	N37	154	202	
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	8	NA1760	III	CORROSIVE	N37	154	203	
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	3	NA1993	I	FLAMMABLE LIQUID		150	201	
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	3	NA1993	II	FLAMMABLE LIQUID		150	202	
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	3	NA1993	III	FLAMMABLE LIQUID		150	203	
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	6.1	NA2810	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	6.1	NA2810	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
D,G	Compounds, tree killing, liquid or Compounds, weed killing, liquid	6.1	NA2810	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Compressed gas, flammable, n.o.s.	2.1	UN1954		FLAMMABLE GAS		306	302,305	
G	Compressed gas, n.o.s.	2.2	UN1956		NONFLAMMABLE GAS		306,307	302,305	
G	Compressed gas, oxidizing, n.o.s.	2.2 (5.1)	UN3156		NONFLAMMABLE GAS, OXIDIZER		306	302	
G, I	Compressed gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone A	2.3 (8)	UN3304		POISON GAS, CORROSIVE	1	None	192	Not Accepted by FedEx Ground
G, I	Compressed gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone B	2.3 (8)	UN3304		POISON GAS, CORROSIVE	2	None	302,305	Not Accepted by FedEx Ground
G, I	Compressed gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone C	2.3 (8)	UN3304		POISON GAS, CORROSIVE	3	None	302,305	Not Accepted by FedEx Ground
G, I	Compressed gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone D	2.3 (8)	UN3304		POISON GAS, CORROSIVE	4	None	302,305	Not Accepted by FedEx Ground
G, I	Compressed gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone A	2.3 (2.1,8)	UN3305		POISON GAS, FLAMMABLE GAS, CORROSIVE	1	None	192	Not Accepted by FedEx Ground
G, I	Compressed gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone B	2.3 (2.1,8)	UN3305		POISON GAS, FLAMMABLE GAS, CORROSIVE	2	None	302,305	Not Accepted by FedEx Ground
G, I	Compressed gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone C	2.3 (2.1,8)	UN3305		POISON GAS, FLAMMABLE GAS, CORROSIVE	3	None	302,305	Not Accepted by FedEx Ground
G, I	Compressed gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone D	2.3 (2.1,8)	UN3305		POISON GAS, FLAMMABLE GAS, CORROSIVE	4	None	302,305	Not Accepted by FedEx Ground
G	Compressed gas, toxic, flammable, n.o.s. Inhalation hazard Zone A	2.3 (2.1)	UN1953		POISON GAS, FLAMMABLE GAS	1	None	192	Not Accepted by FedEx Ground
G	Compressed gas, toxic, flammable, n.o.s. Inhalation hazard Zone B	2.3 (2.1)	UN1953		POISON GAS, FLAMMABLE GAS	2	None	302,305	Not Accepted by FedEx Ground
G	Compressed gas, toxic, flammable, n.o.s. Inhalation hazard Zone C	2.3 (2.1)	UN1953		POISON GAS, FLAMMABLE GAS	3	None	302,305	Not Accepted by FedEx Ground
G	Compressed gas, toxic, flammable, n.o.s. Inhalation hazard Zone D	2.3 (2.1)	UN1953		POISON GAS, FLAMMABLE GAS	4	None	302,305	Not Accepted by FedEx Ground
G	Compressed gas, toxic, n.o.s. Inhalation Hazard Zone A	2.3	UN1955		POISON GAS	1	None	192	Not Accepted by FedEx Ground
G	Compressed gas, toxic, n.o.s. Inhalation Hazard Zone B	2.3	UN1955		POISON GAS	2	None	302,305	Not Accepted by FedEx Ground
G	Compressed gas, toxic, n.o.s. Inhalation Hazard Zone C	2.3	UN1955		POISON GAS	3	None	302,305	Not Accepted by FedEx Ground
G	Compressed gas, toxic, n.o.s. Inhalation Hazard Zone D	2.3	UN1955		POISON GAS	4	None	302,305	Not Accepted by FedEx Ground
G, I	Compressed gas, toxic, oxidizing, corrosive, n.o.s. Inhalation Hazard Zone A	2.3 (5.1,8)	UN3306		POISON GAS, OXIDIZER, CORROSIVE	1	None	192	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G, I	<b>Compressed gas, toxic, oxidizing, corrosive, n.o.s. Inhalation Hazard Zone B</b>	2.3 (5.1,8)	UN3306		POISON GAS, OXIDIZER, CORROSIVE	2	None	302,305	<b>Not Accepted by FedEx Ground</b>
G, I	<b>Compressed gas, toxic, oxidizing, corrosive, n.o.s. Inhalation Hazard Zone C</b>	2.3 (5.1,8)	UN3306		POISON GAS, OXIDIZER, CORROSIVE	3	None	302,305	<b>Not Accepted by FedEx Ground</b>
G, I	<b>Compressed gas, toxic, oxidizing, corrosive, n.o.s. Inhalation Hazard Zone D</b>	2.3 (5.1,8)	UN3306		POISON GAS, OXIDIZER, CORROSIVE	4	None	302,305	<b>Not Accepted by FedEx Ground</b>
G	<b>Compressed gas, toxic, oxidizing, n.o.s. Inhalation Hazard Zone A</b>	2.3 (5.1)	UN3303		POISON GAS, OXIDIZER	1	None	192	<b>Not Accepted by FedEx Ground</b>
G	<b>Compressed gas, toxic, oxidizing, n.o.s. Inhalation Hazard Zone B</b>	2.3 (5.1)	UN3303		POISON GAS, OXIDIZER	2	None	302,305	<b>Not Accepted by FedEx Ground</b>
G	<b>Compressed gas, toxic, oxidizing, n.o.s. Inhalation Hazard Zone C</b>	2.3 (5.1)	UN3303		POISON GAS, OXIDIZER	3	None	302,305	<b>Not Accepted by FedEx Ground</b>
G	<b>Compressed gas, toxic, oxidizing, n.o.s. Inhalation Hazard Zone D</b>	2.3 (5.1)	UN3303		POISON GAS, OXIDIZER	4	None	302,305	<b>Not Accepted by FedEx Ground</b>
D	<b>Consumer commodity</b>	ORM-D			NONE		156, 306	156, 306	See this section in the guide
	<b>Contrivances, water-activated, with burster, expelling charge or propelling charge</b>	1.2L	UN0248	II	EXPLOSIVE 1.2L	101	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Contrivances, water-activated, with burster, expelling charge or propelling charge</b>	1.3L	UN0249	II	EXPLOSIVE 1.3L	101	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Copper acetoarsenite</b>	6.1	UN1585	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Copper acetylde</i>	Forbid- den							
	<i>Copper amine azide</i>	Forbid- den							
	<b>Copper arsenite</b>	6.1	UN1586	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN2776	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN2776	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, liquid, toxic</b>	6.1	UN3010	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, liquid, toxic</b>	6.1	UN3010	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, liquid, toxic</b>	6.1	UN3010	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, liquid, toxic, flammable flashpoint not less than 23 degrees C</b>	6.1 (3)	UN3009	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, liquid, toxic, flammable flashpoint not less than 23 degrees C</b>	6.1 (3)	UN3009	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, liquid, toxic, flammable flashpoint not less than 23 degrees C</b>	6.1 (3)	UN3009	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, solid, toxic</b>	6.1	UN2775	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, solid, toxic</b>	6.1	UN2775	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper based pesticides, solid, toxic</b>	6.1	UN2775	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Copper chlorate</b>	5.1	UN2721	II	OXIDIZER		152	212	
	<b>Copper chloride</b>	8	UN2802	III	CORROSIVE**		154	213	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	<b>Copper cyanide</b>	6.1	UN1587	II	POISON**		153	204	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Copper selenate, see Selenates or Selenites</i>								
	<i>Copper selenite, see Selenates or Selenites</i>								
	<i>Copper tetramine nitrate</i>	Forbid- den							
AW	<b>Copra</b>	4.2	UN1363	III	SPONTANEOUSLY COMBUSTIBLE		None	213	May not be regulated via highway
	<b>Cord, detonating, flexible</b>	1.1D	UN0065	II	EXPLOSIVE 1.1D	102	63(a)	62	<b>Not Accepted by FedEx Ground</b>
	<b>Cord, detonating, flexible</b>	1.4D	UN0289	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Cord, detonating, mild effect or Fuse, detonating, mild effect metal clad</b>	1.4D	UN0104	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Cord detonating or Fuse detonating metal clad</b>	1.2D	UN0102	II	EXPLOSIVE 1.2D		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Cord detonating or Fuse detonating metal clad</b>	1.1D	UN0290	II	EXPLOSIVE 1.1D		None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Cordeau detonant fuse, see Cord, detonating, etc.; Cord, detonating, flexible</i>								
	<b>Cord, igniter</b>	1.4G	UN0066	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Cordite, see Powder, smokeless</i>								
G	<b>Corrosive liquid, acidic, inorganic, n.o.s.</b>	8	UN3264	I	CORROSIVE		None	201	
G	<b>Corrosive liquid, acidic, inorganic, n.o.s.</b>	8	UN3264	II	CORROSIVE		154	202	
G	<b>Corrosive liquid, acidic, inorganic, n.o.s.</b>	8	UN3264	III	CORROSIVE		154	203	
G	<b>Corrosive liquid, acidic, organic, n.o.s.</b>	8	UN3265	I	CORROSIVE		None	201	
G	<b>Corrosive liquid, acidic, organic, n.o.s.</b>	8	UN3265	II	CORROSIVE		154	202	
G	<b>Corrosive liquid, acidic, organic, n.o.s.</b>	8	UN3265	III	CORROSIVE		154	203	
G	<b>Corrosive liquid, basic, inorganic, n.o.s.</b>	8	UN3266	I	CORROSIVE		None	201	
G	<b>Corrosive liquid, basic, inorganic, n.o.s.</b>	8	UN3266	II	CORROSIVE		154	202	
G	<b>Corrosive liquid, basic, inorganic, n.o.s.</b>	8	UN3266	III	CORROSIVE		154	203	
G	<b>Corrosive liquid, basic, organic, n.o.s.</b>	8	UN3267	I	CORROSIVE		None	201	
G	<b>Corrosive liquid, basic, organic, n.o.s.</b>	8	UN3267	II	CORROSIVE		154	202	
G	<b>Corrosive liquid, basic, organic, n.o.s.</b>	8	UN3267	III	CORROSIVE		154	203	
G	<b>Corrosive liquid, self-heating, n.o.s.</b>	8 (4.2)	UN3301	I	CORROSIVE, SPONTANEOUSLY COMBUSTIBLE		None	201	<b>Not Accepted by FedEx Ground</b>
G	<b>Corrosive liquid, self-heating, n.o.s.</b>	8 (4.2)	UN3301	II	CORROSIVE, SPONTANEOUSLY COMBUSTIBLE		154	202	<b>Not Accepted by FedEx Ground</b>
G	<b>Corrosive liquids, flammable, n.o.s.</b>	8 (3)	UN2920	I	CORROSIVE, FLAMMABLE LIQUID		None	201	
G	<b>Corrosive liquids, flammable, n.o.s.</b>	8 (3)	UN2920	II	CORROSIVE, FLAMMABLE LIQUID		None	202	
G	<b>Corrosive liquids, n.o.s.</b>	8	UN1760	I	CORROSIVE		None	201	
G	<b>Corrosive liquids, n.o.s.</b>	8	UN1760	II	CORROSIVE		154	202	
G	<b>Corrosive liquids, n.o.s.</b>	8	UN1760	III	CORROSIVE		154	203	
G	<b>Corrosive liquids, oxidizing, n.o.s.</b>	8 (5.1)	UN3093	I	CORROSIVE, OXIDIZER		None	201	
G	<b>Corrosive liquids, oxidizing, n.o.s.</b>	8 (5.1)	UN3093	II	CORROSIVE, OXIDIZER		None	202	
G	<b>Corrosive liquids, toxic, n.o.s.</b>	8 (6.1)	UN2922	I	CORROSIVE, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Corrosive liquids, toxic, n.o.s.</b>	8 (6.1)	UN2922	II	CORROSIVE, POISON**		154	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Corrosive liquids, toxic, n.o.s.</b>	8 (6.1)	UN2922	III	CORROSIVE, POISON**		154	203	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.154

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Corrosive liquids, water-reactive, n.o.s.	8 (4.3)	UN3094	I	CORROSIVE, DANGEROUS WHEN WET**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Corrosive liquids, water-reactive, n.o.s.	8 (4.3)	UN3094	II	CORROSIVE, DANGEROUS WHEN WET**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Corrosive solid, acidic, inorganic, n.o.s.	8	UN3260	I	CORROSIVE		None	211	
G	Corrosive solid, acidic, inorganic, n.o.s.	8	UN3260	II	CORROSIVE		154	212	
G	Corrosive solid, acidic, inorganic, n.o.s.	8	UN3260	III	CORROSIVE		154	213	
G	Corrosive solid, acidic, organic, n.o.s.	8	UN3261	I	CORROSIVE		None	211	
G	Corrosive solid, acidic, organic, n.o.s.	8	UN3261	II	CORROSIVE		154	212	
G	Corrosive solid, acidic, organic, n.o.s.	8	UN3261	III	CORROSIVE		154	213	
G	Corrosive solid, basic, inorganic, n.o.s.	8	UN3262	I	CORROSIVE		None	211	
G	Corrosive solid, basic, inorganic, n.o.s.	8	UN3262	II	CORROSIVE		154	212	
G	Corrosive solid, basic, inorganic, n.o.s.	8	UN3262	III	CORROSIVE		154	213	
G	Corrosive solid, basic, organic, n.o.s.	8	UN3263	I	CORROSIVE		None	211	
G	Corrosive solid, basic, organic, n.o.s.	8	UN3263	II	CORROSIVE		154	212	
G	Corrosive solid, basic, organic, n.o.s.	8	UN3263	III	CORROSIVE		154	213	
G	Corrosive solids, flammable, n.o.s.	8 (4.1)	UN2921	I	CORROSIVE, FLAMMABLE SOLID		None	211	
G	Corrosive solids, flammable, n.o.s.	8 (4.1)	UN2921	II	CORROSIVE, FLAMMABLE SOLID		None	212	
G	Corrosive solids, n.o.s.	8	UN1759	I	CORROSIVE		None	211	
G	Corrosive solids, n.o.s.	8	UN1759	II	CORROSIVE	128	154	212	
G	Corrosive solids, n.o.s.	8	UN1759	III	CORROSIVE	128	154	213	
G	Corrosive solids, oxidizing, n.o.s.	8 (5.1)	UN3084	I	CORROSIVE, OXIDIZER		None	211	
G	Corrosive solids, oxidizing, n.o.s.	8 (5.1)	UN3084	II	CORROSIVE, OXIDIZER		None	212	
G	Corrosive solids, self-heating, n.o.s.	8 (4.2)	UN3095	I	CORROSIVE, SPONTANEOUSLY COMBUSTIBLE		None	211	Not Accepted by FedEx Ground
G	Corrosive solids, self-heating, n.o.s.	8 (4.2)	UN3095	II	CORROSIVE, SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
G	Corrosive solids, toxic, n.o.s.	8 (6.1)	UN2923	I	CORROSIVE, POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Corrosive solids, toxic, n.o.s.	8 (6.1)	UN2923	II	CORROSIVE, POISON**		154	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Corrosive solids, toxic, n.o.s.	8 (6.1)	UN2923	III	CORROSIVE, POISON**		154	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.154
G	Corrosive solids, water-reactive, n.o.s.	8 (4.3)	UN3096	I	CORROSIVE, DANGEROUS WHEN WET**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Corrosive solids, water-reactive, n.o.s.	8 (4.3)	UN3096	II	CORROSIVE, DANGEROUS WHEN WET**		None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
DW	Cotton	9	NA1365		CLASS 9	137	None	None	May not be regulated via highway
AW	Cotton waste, oily	4.2	UN1364	III	SPONTANEOUSLY COMBUSTIBLE		None	213	May not be regulated via highway
AIW	Cotton, wet	4.2	UN1365	III	SPONTANEOUSLY COMBUSTIBLE		None	204	May not be regulated via highway
	Coumarin derivative pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C	3 (6.1)	UN3024	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C	3 (6.1)	UN3024	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, liquid, toxic	6.1	UN3026	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, liquid, toxic	6.1	UN3026	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, liquid, toxic	6.1	UN3026	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Coumarin derivative pesticides, liquid, toxic, flammable <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3025	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, liquid, toxic, flammable <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3025	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, liquid, toxic, flammable <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3025	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, solid, toxic	6.1	UN3027	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, solid, toxic	6.1	UN3027	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Coumarin derivative pesticides, solid, toxic	6.1	UN3027	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Cresols, liquid	6.1 (8)	UN2076	II	POISON, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Cresols, solid	6.1 (8)	UN3455	II	POISON, CORROSIVE**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Cresylic acid	6.1 (8)	UN2022	II	POISON, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Crotonaldehyde, stabilized	6.1 (3)	UN1143	I	POISON, FLAMMABLE LIQUID	2	None	227	<b>Not Accepted by FedEx Ground</b>
	Crotonic acid, <i>liquid</i>	8	UN2823	III	CORROSIVE		154	203	
	Crotonic acid, <i>solid</i>	8	UN2823	III	CORROSIVE		154	213	
	Crotonylene	3	UN1144	I	FLAMMABLE LIQUID		150	201	
	Cupriethylenediamine solution	8 (6.1)	UN1761	II	CORROSIVE, POISON**		154	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Cupriethylenediamine solution	8 (6.1)	UN1761	III	CORROSIVE, POISON**		154	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Cutters, cable, explosive	1.4S	UN0070	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Cyanide or cyanide mixtures, dry, see Cyanides, inorganic, solid, n.o.s.</i>								
	Cyanides, inorganic, solid, n.o.s.	6.1	UN1588	I	POISON**	N74,N75	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Cyanides, inorganic, solid, n.o.s.	6.1	UN1588	II	POISON**	N74,N75	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Cyanides, inorganic, solid, n.o.s.	6.1	UN1588	III	POISON**	N74,N75	153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Cyanide solutions, n.o.s.	6.1	UN1935	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Cyanide solutions, n.o.s.	6.1	UN1935	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Cyanide solutions, n.o.s.	6.1	UN1935	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Cyanogen	2.3 (2.1)	UN1026		POISON GAS, FLAMMABLE GAS	2	None	304	Not Accepted by FedEx Ground
	Cyanogen bromide	6.1 (8)	UN1889	I	POISON, CORROSIVE**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Cyanogen chloride, stabilized	2.3 (8)	UN1589		POISON GAS, CORROSIVE	1	None	192	Not Accepted by FedEx Ground
	Cyanuric chloride	8	UN2670	II	CORROSIVE		None	212	
	<i>Cyanuric triazide</i>	Forbid- den							
	Cyclobutane	2.1	UN2601		FLAMMABLE GAS		306	304	
	Cyclobutyl chloroformate	6.1 (8,3)	UN2744	II	POISON, CORROSIVE, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	1,5,9-Cyclododecatriene	6.1	UN2518	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Cycloheptane	3	UN2241	II	FLAMMABLE LIQUID		150	202	
	Cycloheptatriene	3 (6.1)	UN2603	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Cycloheptene	3	UN2242	II	FLAMMABLE LIQUID		150	202	
	Cyclohexane	3	UN1145	II	FLAMMABLE LIQUID		150	202	
	Cyclohexanone	3	UN1915	III	FLAMMABLE LIQUID		150	203	
	Cyclohexene	3	UN2256	II	FLAMMABLE LIQUID		150	202	
	Cyclohexenyltrichlorosilane	8	UN1762	II	CORROSIVE	N34	None	202	
	Cyclohexyl acetate	3	UN2243	III	FLAMMABLE LIQUID		150	203	
	Cyclohexylamine	8 (3)	UN2357	II	CORROSIVE, FLAMMABLE LIQUID		None	202	
	Cyclohexyl isocyanate	6.1 (3)	UN2488	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	Cyclohexyl mercaptan	3	UN3054	III	FLAMMABLE LIQUID		150	203	
	Cyclohexyltrichlorosilane	8	UN1763	II	CORROSIVE	N34	None	202	
	Cyclonite and cyclotetramethylenetetranitramine mixtures, wetted or desensitized <i>see</i> RDX and HMX mixtures, wetted or desensitized <i>etc.</i>								
	Cyclonite and HMX mixtures, wetted or desensitized <i>see</i> RDX and HMX mixtures, wetted or desensitized <i>etc.</i>								
	Cyclonite and octogen mixtures, wetted or desensitized <i>see</i> RDX and HMX mixtures, wetted or desensitized <i>etc.</i>								
	Cyclonite, <i>see</i> Cyclotrimethylenetrinitramine, <i>etc.</i>								
	Cyclooctadiene phosphines, <i>see</i> 9-Phosphabicyclononanes								
	Cyclooctadienes	3	UN2520	III	FLAMMABLE LIQUID		150	203	
	Cyclooctatetraene	3	UN2358	II	FLAMMABLE LIQUID		150	202	
	Cyclopentane	3	UN1146	II	FLAMMABLE LIQUID		150	202	
	<i>Cyclopentane, methyl, see</i> Methylecyclopentane								
	Cyclopentanol	3	UN2244	III	FLAMMABLE LIQUID		150	203	
	Cyclopentanone	3	UN2245	III	FLAMMABLE LIQUID		150	203	
	Cyclopentene	3	UN2246	II	FLAMMABLE LIQUID		150	202	
	Cyclopropane	2.1	UN1027		FLAMMABLE GAS		306	304	
	Cyclotetramethylenetetranitramine, desensitized or Octogen, desensitized or HMX, desensitized	1.1D	UN0484	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>Cyclotetramethylene tetranitramine (dry or unphlegmatized) (HMX)</i>	Forbid- den							

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Cyclotetramethylenetetranitramine, wetted <i>or</i> HMX, wetted <i>or</i> Octogen, wetted <i>with not less than 15 percent water, by mass</i>	1.1D	UN0226	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Cyclotrimethylenenitramine and octogen, mixtures, wetted <i>or</i> desensitized <i>see</i> RDX and HMX mixtures, wetted <i>or</i> desensitized <i>etc.</i>								
	Cyclotrimethylenetrinitramine and cyclotetramethylenetetranitramine mixtures, wetted <i>or</i> desensitized <i>see</i> RDX and HMX mixtures, wetted <i>or</i> desensitized <i>etc.</i>								
	Cyclotrimethylenetrinitramine and HMX mixtures, wetted <i>or</i> desensitized <i>see</i> RDX and HMX mixtures, wetted <i>or</i> desensitized <i>etc.</i>								
	Cyclotrimethylenetrinitramine, desensitized <i>or</i> Cyclonite, desensitized <i>or</i> Hexogen, desensitized <i>or</i> RDX, desensitized	1.1D	UN0483	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Cyclotrimethylenetrinitramine, wetted <i>or</i> Cyclonite, wetted <i>or</i> Hexogen, wetted <i>or</i> RDX, wetted <i>with not less than 15 percent water by mass</i>	1.1D	UN0072	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Cymenes	3	UN2046	III	FLAMMABLE LIQUID		150	203	
	Dangerous Goods in Machinery <i>or</i> Dangerous Goods in Apparatus	9	UN3363			136	None	222	May not be regulated via highway
	Decaborane	4.1 (6.1)	UN1868	II	FLAMMABLE SOLID, POISON**		None	212	Accepted only when packaged under applicable special permit <i>or</i> 49CFR 173.13
	Decahydronaphthalene	3	UN1147	III	FLAMMABLE LIQUID		150	203	
	n-Decane	3	UN2247	III	FLAMMABLE LIQUID		150	203	
	Deflagrating metal salts of aromatic nitroderivatives, n.o.s <i>Delay electric igniter, see Igniters</i>	1.3C	UN0132	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
D	Denatured alcohol	3	NA1987	II	FLAMMABLE LIQUID	172	150	202	
D	Denatured alcohol <i>Depth charges, see Charges, depth</i>	3	NA1987	III	FLAMMABLE LIQUID	172	150	203	
G	Desensitized explosive, liquid, n.o.s.	3	UN3379	I	FLAMMABLE LIQUID	164	None	201	
G	Desensitized explosive, solid, n.o.s. <i>Detonating relays, see Detonators, etc.</i>	4.1	UN3380	I	FLAMMABLE SOLID	164	None	211	
	Detonator assemblies, non-electric <i>for blasting</i>	1.1B	UN0360	II	EXPLOSIVE 1.1B		None	62	Not Accepted by FedEx Ground
	Detonator assemblies, non-electric <i>for blasting</i>	1.4B	UN0361	II	EXPLOSIVE 1.4B	103	63(f), 63(g)	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Detonator assemblies, non-electric <i>for blasting</i>	1.4B	UN0500	II	EXPLOSIVE 1.4B		63(f), 63(g)	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Detonators, electric, <i>for blasting</i>	1.1B	UN0030	II	EXPLOSIVE 1.1B		63(f), 63(g)	62	Not Accepted by FedEx Ground
	Detonators, electric, <i>for blasting</i>	1.4B	UN0255	II	EXPLOSIVE 1.4B	103	63(f), 63(g)	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Detonators, electric, <i>for blasting</i>	1.4S	UN0456	II	EXPLOSIVE 1.4S		63(f), 63(g)	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Detonators for ammunition	1.1B	UN0073	II	EXPLOSIVE 1.1B		None	62	Not Accepted by FedEx Ground
	Detonators for ammunition	1.2B	UN0364	II	EXPLOSIVE 1.2B		None	62	Not Accepted by FedEx Ground
	Detonators for ammunition	1.4B	UN0365	II	EXPLOSIVE 1.4B	103	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Detonators for ammunition</b>	1.4S	UN0366	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Detonators, non-electric, for blasting</b>	1.1B	UN0029	II	EXPLOSIVE 1.1B		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Detonators, non-electric, for blasting</b>	1.4B	UN0267	II	EXPLOSIVE 1.4B	103	63(f), 63(g)	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Detonators, non-electric, for blasting</b>	1.4S	UN0455	II	EXPLOSIVE 1.4S		63(f), 63(g)	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Deuterium, compressed</b>	2.1	UN1957		FLAMMABLE GAS		306	302	
	<b>Devices, small, hydrocarbon gas powered or Hydrocarbon gas refills for small devices with release device</b>	2.1	UN3150		FLAMMABLE GAS		306	304	
	<i>Di-(1-hydroxytetrazole) (dry)</i>	Forbid- den							
	<i>Di-(1-naphthoyl) peroxide</i>	Forbid- den							
	<i>Di-2,4-dichlorobenzoyl peroxide, with more than 75 percent with water</i>	Forbid- den							
	<i>Di-2-ethylhexyl phosphoric acid, see Diisooctyl acid phosphate</i>								
	<i>2,2-Di-(4,4-di-tert-butylperoxycyclohexyl) propane, with more than 42 percent with inert solid</i>	Forbid- den							
	<b>Diacetone alcohol</b>	3	UN1148	II	FLAMMABLE LIQUID		150	202	
	<b>Diacetone alcohol</b>	3	UN1148	III	FLAMMABLE LIQUID		150	203	
	<i>Diacetone alcohol peroxides, with more than 57 percent in solution with more than 9 percent hydrogen peroxide, less than 26 percent diacetone alcohol and less than 9 percent water; total active oxygen content more than 9 percent by mass</i>	Forbid- den							
	<i>Diacetyl peroxide, solid, or with more than 25 percent in solution</i>	Forbid- den							
	<i>Diacetyl, see Butanedione</i>								
	<b>Diagnostic specimen</b>	6.2				134	199		<b>Not Accepted by FedEx Ground</b>
	<b>Diallylamine</b>	3 (6.1.8)	UN2359	II	FLAMMABLE LIQUID, POISON, CORROSIVE**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Diallylether</b>	3 (6.1)	UN2360	II	FLAMMABLE LIQUID, POISON**	N12	150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>4,4i-Diaminodiphenyl methane</b>	6.1	UN2651	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>p-Diazidobenzene</i>	Forbid- den							
	<i>1,2-Diazidoethane</i>	Forbid- den							
	<i>1,1 i-Diazoaminonaphthalene</i>	Forbid- den							
	<i>Diazoaminotetrazole (dry)</i>	Forbid- den							
	<i>Diazodinitrophenol (dry)</i>	Forbid- den							
	<b>Diazodinitrophenol, wetted with not less than 40 percent water or mixture of alcohol and water, by mass</b>	1.1A	UN0074	II	EXPLOSIVE 1.1A	111, 117	None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Diazodiphenylmethane</i>	Forbid- den							
	<i>Diazonium nitrates (dry)</i>	Forbid- den							
	<i>Diazonium perchlorates (dry)</i>	Forbid- den							
	<i>1,3-Diazopropane</i>	Forbid- den							
	<b>Dibenzylchlorosilane</b>	8	UN2434	II	CORROSIVE		154	202	
	<i>Dibenzyl peroxydicarbonate, with more than 87 percent with water</i>	Forbid- den							
	<i>Di-(beta-nitroxyethyl) ammonium nitrate</i>	Forbid- den							

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Diborane</b>	2.3 (2.1)	UN1911		POISON GAS, FLAMMABLE GAS	1	None	302	<b>Not Accepted by FedEx Ground</b>
D	<b>Diborane mixtures</b>	2.1	NA1911		FLAMMABLE GAS	5	None	302	
	<i>Dibromoacetylene</i>	Forbid- den							
	<b>1,2-Dibromobutan-3-one</b>	6.1	UN2648	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dibromochloropropane</b>	6.1	UN2872	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dibromochloropropane</b>	6.1	UN2872	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
A	<b>Dibromodifluoromethane, R12B2</b>	9	UN1941	III	NONE		155	203	May not be regulated via highway
	<i>1,2-Dibromoethane, see Ethylene dibromide</i>								
	<b>Dibromomethane</b>	6.1	UN2664	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dibutylaminoethanol</b>	6.1	UN2873	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dibutyl ethers</b>	3	UN1149	III	FLAMMABLE LIQUID		150	203	
	<i>N,N'-Dichlorazodicarbonamidine (salts of) (dry)</i>	Forbid- den							
	<b>1,2-Dichloro-1,1,2,2-Tetrafluoroethane or Refrigerant gas, R 114</b>	2.2	UN1958		NONFLAMMABLE GAS		306	304	
	<b>1,1-Dichloro-1-nitroethane</b>	6.1	UN2650	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	<b>3,5-Dichloro-2,4,6-trifluoropyridine</b>	6.1	NA9264	I	POISON	2	None	227	<b>Not Accepted by FedEx Ground</b>
	<b>Dichloroacetic acid</b>	8	UN1764	II	CORROSIVE	N34	154	202	
	<b>1,3-Dichloroacetone</b>	6.1	UN2649	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dichloroacetyl chloride</b>	8	UN1765	II	CORROSIVE	N34	154	202	
	<i>Dichloroacetylene</i>	Forbid- den							
+	<b>Dichloroanilines, liquid</b>	6.1	UN1590	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	<b>Dichloroanilines, solid</b>	6.1	UN3442	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	<b>o-Dichlorobenzene</b>	6.1	UN1591	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>2,2'-Dichlorodiethyl ether</b>	6.1 (3)	UN1916	II	POISON, FLAMMABLE LIQUID**	N33,N34	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dichlorodifluoromethane and difluoroethane azeotropic mixture or Refrigerant gas R 500 with approximately 74 percent dichlorodifluoromethane</b>	2.2	UN2602		NONFLAMMABLE GAS		306	304	
	<b>Dichlorodifluoromethane or Refrigerant gas R 12</b>	2.2	UN1028		NONFLAMMABLE GAS		306	304	
	<b>Dichlorodimethyl ether, symmetrical</b>	6.1 (3)	UN2249	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>1,1-Dichloroethane</b>	3	UN2362	II	FLAMMABLE LIQUID		150	202	
	<i>1,2-Dichloroethane, see Ethylene dichloride</i>								
	<b>1,2-Dichloroethylene</b>	3	UN1150	II	FLAMMABLE LIQUID		150	202	
	<i>Dichloroethyl sulfide</i>	Forbid- den							
	<b>Dichlorofluoromethane or Refrigerant gas R 21</b>	2.2	UN1029		NONFLAMMABLE GAS		306	304	
	<b>Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts</b>	5.1	UN2465	II	OXIDIZER	28	152	212	
	<b>Dichloroisopropyl ether</b>	6.1	UN2490	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dichloromethane</b>	6.1	UN1593	III	POISON**	N36	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dichloropentanes</b>	3	UN1152	III	FLAMMABLE LIQUID		150	203	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Dichlorophenyl isocyanates	6.1	UN2250	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Dichlorophenyltrichlorosilane	8	UN1766	II	CORROSIVE	N34	None	202	
	1,2-Dichloropropane	3	UN1279	II	FLAMMABLE LIQUID	N36	150	202	
	1,3-Dichloropropanol-2	6.1	UN2750	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Dichloropropene and propylene dichloride mixture, see 1,2-Dichloropropane</i>								
	Dichloropropenes	3	UN2047	II	FLAMMABLE LIQUID		150	202	
	Dichloropropenes	3	UN2047	III	FLAMMABLE LIQUID		150	203	
	Dichlorosilane	2.3 (2.1,8)	UN2189		POISON GAS, FLAMMABLE GAS, CORROSIVE	2	None	304	Not Accepted by FedEx Ground
	<i>Dichlorovinylchloroarsine</i>	Forbid- den							
	<i>Dicycloheptadiene, see Bicyclo [2,2,1] hepta-2,5-diene, stabilized</i>								
	Dicyclohexylamine	8	UN2565	III	CORROSIVE		154	203	
	Dicyclohexylammonium nitrite	4.1	UN2687	III	FLAMMABLE SOLID		151	213	
	Dicyclopentadiene	3	UN2048	III	FLAMMABLE LIQUID		150	203	
	1,2-Di-(dimethylamino) ethane	3	UN2372	II	FLAMMABLE LIQUID		150	202	
	Didymium nitrate	5.1	UN1465	III	OXIDIZER		152	213	
D	Diesel fuel	3	NA1993	III	NONE	144	150	203	
I	Diesel fuel	3	UN1202	III	FLAMMABLE LIQUID	144	150	203	
	<i>Diethanol nitrosamine dinitrate (dry)</i>	Forbid- den							
	Diethoxymethane	3	UN2373	II	FLAMMABLE LIQUID		150	202	
	3,3-Diethoxypropene	3	UN2374	II	FLAMMABLE LIQUID		150	202	
	3-Diethylamino-propylamine	3 (8)	UN2684	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	Diethylamine	3 (8)	UN1154	II	FLAMMABLE LIQUID, CORROSIVE	N34	150	202	
	2-Diethylaminoethanol	8 (3)	UN2686	II	CORROSIVE, FLAMMABLE LIQUID		None	202	
+	N,N-Diethylaniline	6.1	UN2432	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Diethylbenzene	3	UN2049	III	FLAMMABLE LIQUID		150	203	
	Diethyl carbonate	3	UN2366	III	FLAMMABLE LIQUID		150	203	
	<i>Diethyl cellosolve, see Ethylene glycol diethyl ether</i>								
	Diethyldichlorosilane	8 (3)	UN1767	II	CORROSIVE, FLAMMABLE LIQUID	N34	None	202	
	<i>Diethylene glycol dinitrate</i>	Forbid- den							
	Diethyleneglycol dinitrate, desensitized with not less than 25 percent non-volatile water-soluble phlegmatizer, by mass	1.1D	UN0075	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Diethylenetriamine	8	UN2079	II	CORROSIVE		154	202	
	Diethyl ether or Ethyl ether	3	UN1155	I	FLAMMABLE LIQUID		150	201	
	N,N-Diethylethylenediamine	8 (3)	UN2685	II	CORROSIVE, FLAMMABLE LIQUID		None	202	
	<i>Diethylgold bromide</i>	Forbid- den							
	Diethyl ketone	3	UN1156	II	FLAMMABLE LIQUID		150	202	
	<i>Diethyl peroxydicarbonate, with more than 27 percent in solution</i>	Forbid- den							
	Diethyl sulfate	6.1	UN1594	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Diethyl sulfide	3	UN2375	II	FLAMMABLE LIQUID		None	202	
	Diethylthiophosphoryl chloride	8	UN2751	II	CORROSIVE		None	212	
	Diethylzinc	4.2 (4.3)	UN1366	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET	173	None	181	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Difluorochloroethanes, see 1-Chloro-1,1-difluoroethanes</i>								
	<b>1,1-Difluoroethane or Refrigerant gas R 152a</b>	2.1	UN1030		FLAMMABLE GAS		306	304	
	<b>1,1-Difluoroethylene or Refrigerant gas R 1132a</b>	2.1	UN1959		FLAMMABLE GAS		306	304	
	<b>Difluoromethane or Refrigerant gas R 32</b>	2.1	UN3252		FLAMMABLE GAS		306	302	
	<b>Difluorophosphoric acid, anhydrous</b>	8	UN1768	II	CORROSIVE	N5,N34	None	202	
	<b>2,3-Dihydropyran</b>	3	UN2376	II	FLAMMABLE LIQUID		150	202	
	<i>1,8-Dihydroxy-2,4,5,7-tetranitroanthraquinone (chrysamminic acid)</i>	Forbid- den							
	<i>Diiodoacetylene</i>	Forbid- den							
	<b>Diisobutylamine</b>	3 (8)	UN2361	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	<b>Diisobutylene, isomeric compounds</b>	3	UN2050	II	FLAMMABLE LIQUID		150	202	
	<b>Diisobutyl ketone</b>	3	UN1157	III	FLAMMABLE LIQUID		150	203	
	<b>Diisooctyl acid phosphate</b>	8	UN1902	III	CORROSIVE		154	203	
	<b>Diisopropylamine</b>	3 (8)	UN1158	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<i>Diisopropylbenzene hydroperoxide, with more than 72 percent in solution</i>	Forbid- den							
	<b>Diisopropyl ether</b>	3	UN1159	II	FLAMMABLE LIQUID		150	202	
	<b>Diketene, stabilized</b>	6.1 (3)	UN2521	I	POISON, FLAMMABLE LIQUID	2	None	227	<b>Not Accepted by FedEx Ground</b>
	<b>1,2-Dimethoxyethane</b>	3	UN2252	II	FLAMMABLE LIQUID		150	202	
	<b>1,1-Dimethoxyethane</b>	3	UN2377	II	FLAMMABLE LIQUID		150	202	
	<i>2,5-Dimethyl-2,5-dihydroperoxy hexane, with more than 82 percent with water</i>	Forbid- den							
	<b>Dimethylamine, anhydrous</b>	2.1	UN1032		FLAMMABLE GAS		None	304	
	<b>Dimethylamine solution</b>	3 (8)	UN1160	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>2-Dimethylaminoacetonitrile</b>	3 (6.1)	UN2378	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>2-Dimethylaminoethanol</b>	8 (3)	UN2051	II	CORROSIVE, FLAMMABLE LIQUID		154	202	
	<b>2-Dimethylaminoethyl acrylate</b>	6.1	UN3302	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>2-Dimethylaminoethyl methacrylate</b>	6.1	UN2522	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>N,N-Dimethylaniline</b>	6.1	UN2253	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>2,3-Dimethylbutane</b>	3	UN2457	II	FLAMMABLE LIQUID		150	202	
	<b>1,3-Dimethylbutylamine</b>	3 (8)	UN2379	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>Dimethylcarbamoyl chloride</b>	8	UN2262	II	CORROSIVE		154	202	
	<b>Dimethyl carbonate</b>	3	UN1161	II	FLAMMABLE LIQUID		150	202	
	<i>Dimethyl chlorothiophosphate, see Dimethyl thiophosphoryl chloride</i>								
	<b>Dimethylcyclohexanes</b>	3	UN2263	II	FLAMMABLE LIQUID		150	202	
	<b>N,N-Dimethylcyclohexylamine</b>	8 (3)	UN2264	II	CORROSIVE, FLAMMABLE LIQUID		154	202	
	<b>Dimethyldichlorosilane</b>	3 (8)	UN1162	II	FLAMMABLE LIQUID, CORROSIVE		None	202	
	<b>Dimethyldiethoxysilane</b>	3	UN2380	II	FLAMMABLE LIQUID		150	202	
	<b>Dimethyldioxanes</b>	3	UN2707	II	FLAMMABLE LIQUID		150	202	
	<b>Dimethyldioxanes</b>	3	UN2707	III	FLAMMABLE LIQUID		150	203	
	<b>Dimethyl disulfide</b>	3	UN2381	II	FLAMMABLE LIQUID		150	202	
	<b>Dimethyl ether</b>	2.1	UN1033		FLAMMABLE GAS		306	304	
	<b>N,N-Dimethylformamide</b>	3	UN2265	III	FLAMMABLE LIQUID		150	203	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Dimethylhexane dihydroperoxide (dry)</i>	Forbid- den							
	<b>Dimethylhydrazine, symmetrical</b>	6.1 (3)	UN2382	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	<b>Dimethylhydrazine, unsymmetrical</b>	6.1 (3,8)	UN1163	I	POISON, FLAMMABLE LIQUID, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
	<b>Dimethyl-N-propylamine</b>	3 (8)	UN2266	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>2,2-Dimethylpropane</b>	2.1	UN2044		FLAMMABLE GAS		306	304	
	<b>Dimethyl sulfate</b>	6.1 (8)	UN1595	I	POISON, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
	<b>Dimethyl sulfide</b>	3	UN1164	II	FLAMMABLE LIQUID		150	202	
	<b>Dimethyl thiophosphoryl chloride</b>	6.1 (8)	UN2267	II	POISON, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dimethylzinc</b>	4.2 (4.3)	UN1370	I	SPONTANEOUSLY COMBUSTIBLE,DANGEROUS WHEN WET	173	None	181	Not Accepted by FedEx Ground
	<b>Di-n-amylamine</b>	3 (6.1)	UN2841	III	FLAMMABLE LIQUID, POISON**		150	203	Accepted only when packaged under applicable special permit, 49CFR 173.13
	<b>Di-n-butylamine</b>	8 (3)	UN2248	II	CORROSIVE, FLAMMABLE LIQUID		None	202	
	<i>Di-n-butyl peroxydicarbonate, with more than 52 percent in solution</i>	Forbid- den							
	<i>1,4-Dinitro-1,1,4,4-tetramethylolbutanetetranitrate (dry)</i>	Forbid- den							
	<i>2,4-Dinitro-1,3,5-trimethylbenzene</i>	Forbid- den							
	<i>1,3-Dinitro-4,5-dinitrosobenzene</i>	Forbid- den							
	<i>1,3-Dinitro-5,5-dimethyl hydantoin</i>	Forbid- den							
	<i>Dinitro-7,8-dimethylglycoluril (dry)</i>	Forbid- den							
	<b>Dinitroanilines</b>	6.1	UN1596	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dinitrobenzenes, liquid</b>	6.1	UN1597	II	POISON**	11	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dinitrobenzenes, liquid</b>	6.1	UN1597	III	POISON**	11	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dinitrobenzenes, solid</b>	6.1	UN3443	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Dinitrochlorobenzene, see Chlorodinitrobenzene</i>								
	<i>1,2-Dinitroethane</i>	Forbid- den							
	<i>1,1-Dinitroethane (dry)</i>	Forbid- den							
	<b>Dinitrogen tetroxide</b>	2.3 (5.1,8)	UN1067		POISON GAS, OXIDIZER, CORROSIVE	1	None	336	Not Accepted by FedEx Ground
	<b>Dinitroglycoluril or Dingu</b>	1.1D	UN0489	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>Dinitromethane</i>	Forbid- den							
	<b>Dinitro-o-cresol</b>	6.1	UN1598	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dinitrophenolates alkali metals, dry or wetted with less than 15 percent water, by mass</b>	1.3C (6.1)	UN0077	II	EXPLOSIVE 1.3C, POISON		None	62	Not Accepted by FedEx Ground
	<b>Dinitrophenolates, wetted with not less than 15 percent water, by mass</b>	4.1 (6.1)	UN1321	I	FLAMMABLE SOLID, POISON**	23,N41	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dinitrophenol, dry or wetted with less than 15 percent water, by mass</b>	1.1D (6.1)	UN0076	II	EXPLOSIVE 1.1D, POISON		None	62	Not Accepted by FedEx Ground
	<b>Dinitrophenol solutions</b>	6.1	UN1599	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dinitrophenol solutions</b>	6.1	UN1599	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Dinitrophenol, wetted with not less than 15 percent water, by mass</b>	4.1 (6.1)	UN1320	I	FLAMMABLE SOLID, POISON**	23,N41	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Dinitropropylene glycol</i>	Forbid- den							
	<b>Dinitroresorcinol, dry or wetted with less than 15 percent water, by mass</b>	1.1D	UN0078	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>2,4-Dinitroresorcinol (heavy metal salts of) (dry)</i>	Forbid- den							
	<i>4,6-Dinitroresorcinol (heavy metal salts of) (dry)</i>	Forbid- den							
	<b>Dinitroresorcinol, wetted with not less than 15 percent water, by mass</b>	4.1	UN1322	I	FLAMMABLE SOLID	23,N41	None	211	
	<i>3,5-Dinitrosalicylic acid (lead salt) (dry)</i>	Forbid- den							
	<b>Dinitrosobenzene</b>	1.3C	UN0406	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	<i>Dinitrosobenzylamidine and salts of (dry)</i>	Forbid- den							
	<i>2,2-Dinitrostilbene</i>	Forbid- den							
	<b>Dinitrotoluenes, liquid</b>	6.1	UN2038	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Dinitrotoluenes, molten</b>	6.1	UN1600	II	POISON		None	202	Not Accepted by FedEx Ground
	<b>Dinitrotoluenes, solid</b>	6.1	UN3454	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>a, a 1-Di-(nitroxy) methylether</i>	Forbid- den							
	<i>1,9-Dinitroxy pentamethylene-2,4, 6,8-tetramine (dry)</i>	Forbid- den							
	<b>Di-n-propyl ether</b>	3	UN2384	II	FLAMMABLE LIQUID		150	202	
	<b>Dioxane</b>	3	UN1165	II	FLAMMABLE LIQUID		150	202	
	<b>Dioxolane</b>	3	UN1166	II	FLAMMABLE LIQUID		150	202	
	<b>Dipentene</b>	3	UN2052	III	FLAMMABLE LIQUID		150	203	
	<b>Diphenylamine chloroarsine</b>	6.1	UN1698	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Diphenylchloroarsine, liquid</b>	6.1	UN1699	I	POISON**	N33,N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Diphenylchloroarsine, solid</b>	6.1	UN3450	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Diphenyldichlorosilane</b>	8	UN1769	II	CORROSIVE	N34	None	202	
	<b>Diphenylmethyl bromide</b>	8	UN1770	II	CORROSIVE		154	212	
	<b>Dipicrylamine, see Hexanitrodiphenylamine</b>								
	<b>Dipicryl sulfide, dry or wetted with less than 10 percent water, by mass</b>	1.1D	UN0401	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Dipicryl sulfide, wetted with not less than 10 percent water, by mass</b>	4.1	UN2852	I	FLAMMABLE SOLID	162, N41, N484	None	211	
	<i>Dipropionyl peroxide, with more than 28 percent in solution</i>	Forbid- den							
	<b>Dipropylamine</b>	3 (8)	UN2383	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>Dipropyl ketone</b>	3	UN2710	III	FLAMMABLE LIQUID		150	203	
G	<b>Disinfectant, liquid, corrosive n.o.s.</b>	8	UN1903	I	CORROSIVE		None	201	
G	<b>Disinfectant, liquid, corrosive n.o.s.</b>	8	UN1903	II	CORROSIVE		154	202	
G	<b>Disinfectant, liquid, corrosive n.o.s.</b>	8	UN1903	III	CORROSIVE		154	203	
G	<b>Disinfectants, liquid, toxic, n.o.s.</b>	6.1	UN3142	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Disinfectants, liquid, toxic, n.o.s.</b>	6.1	UN3142	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Disinfectants, liquid, toxic, n.o.s.</b>	6.1	UN3142	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Disinfectants, solid, toxic, n.o.s.	6.1	UN1601	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Disinfectants, solid, toxic, n.o.s.	6.1	UN1601	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Disinfectants, solid, toxic, n.o.s.	6.1	UN1601	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Disodium trioxosilicate	8	UN3253	III	CORROSIVE		154	213	
G	Dispersant gases, n.o.s. <i>see</i> Refrigerant gases, n.o.s.								
	2,2-Di-(tert-butylperoxy) butane, with more than 55 percent in solution	Forbid- den							
	Di-(tert-butylperoxy) phthalate, with more than 55 percent in solution	Forbid- den							
	Divinyl ether, stabilized	3	UN1167	I	FLAMMABLE LIQUID		None	201	
	Dodecyltrichlorosilane	8	UN1771	II	CORROSIVE	N34	None	202	
	Dry ice, <i>see</i> Carbon dioxide, solid								
G	Dyes, liquid, corrosive n.o.s. <i>or</i> Dye intermediates, liquid, n.o.s.	8	UN2801	I	CORROSIVE	11	None	201	
G	Dyes, liquid, corrosive n.o.s. <i>or</i> Dye intermediates, liquid, n.o.s.	8	UN2801	II	CORROSIVE	11	154	202	
G	Dyes, liquid, corrosive n.o.s. <i>or</i> Dye intermediates, liquid, n.o.s.	8	UN2801	III	CORROSIVE	11	154	203	
G	Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s.	6.1	UN1602	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s.	6.1	UN1602	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s.	6.1	UN1602	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s.	8	UN3147	I	CORROSIVE		None	211	
G	Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s.	8	UN3147	II	CORROSIVE		154	212	
G	Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s.	8	UN3147	III	CORROSIVE		154	213	
G	Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s.	6.1	UN3143	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s.	6.1	UN3143	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s.	6.1	UN3143	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Dynamite, <i>see</i> Explosive, blasting, type A								
	Electrolyte (acid or alkali) for batteries, <i>see</i> Battery fluid, acid <i>or</i> Battery fluid, alkali								
	Elevated temperature liquid, flammable, n.o.s., with flash point above 37.8 C, at or above its flash point	3	UN3256	III	FLAMMABLE LIQUID		None	None	Not Accepted by FedEx Ground
	Elevated temperature liquid, n.o.s., at or above 100 C and below its flash point (including molten metals, molten salts, etc.).	9	UN3257	III	CLASS 9		None	None	Not Accepted by FedEx Ground
	Elevated temperature solid, n.o.s., at or above 240 C, <i>see</i> section 173.247(h)(4)	9	UN3258	III	CLASS 9		247(h)(4)	None	Not Accepted by FedEx Ground
	Engines, internal combustion, flammable gas powered	9	UN3166		CLASS 9	135	220	220	May not be regulated via highway
	Engines, internal combustion, flammable liquid powered	9	UN3166		CLASS 9	135	220	220	May not be regulated via highway
G	Environmentally hazardous substances, liquid, n.o.s.	9	UN3082	III	CLASS 9	8	155	203	
G	Environmentally hazardous substances, solid, n.o.s.	9	UN3077	III	CLASS 9	8,N20	155	213	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Epibromohydrin	6.1 (3)	UN2558	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Epichlorohydrin	6.1 (3)	UN2023	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	1,2-Epoxy-3-ethoxypropane	3	UN2752	III	FLAMMABLE LIQUID		150	203	
	Esters, n.o.s.	3	UN3272	II	FLAMMABLE LIQUID		150	202	
	Esters, n.o.s.	3	UN3272	III	FLAMMABLE LIQUID		150	203	
	<i>Etching acid, liquid, n.o.s., see Hydrofluoric acid, solution etc.</i>								
	Ethane	2.1	UN1035		FLAMMABLE GAS		306	304	
D	Ethane-Propane mixture, refrigerated liquid	2.1	NA1961		FLAMMABLE GAS		None	316	Not Accepted by FedEx Ground
	Ethane, refrigerated liquid	2.1	UN1961		FLAMMABLE GAS		None	None	Not Accepted by FedEx Ground
	<i>Ethanol amine dinitrate</i>	Forbid- den							
	Ethanolamine or Ethanolamine solutions	8	UN2491	III	CORROSIVE		154	203	
	Ethanol or Ethyl alcohol or Ethanol solutions or Ethyl alcohol solutions	3	UN1170	II	FLAMMABLE LIQUID	24	150	202	
	Ethanol or Ethyl alcohol or Ethanol solutions or Ethyl alcohol solutions	3	UN1170	III	FLAMMABLE LIQUID	24	150	203	
	<i>Ether, see Diethyl ether</i>								
	Ethers, n.o.s.	3	UN3271	II	FLAMMABLE LIQUID		150	202	
	Ethers, n.o.s.	3	UN3271	III	FLAMMABLE LIQUID		150	203	
	Ethyl 2-chloropropionate	3	UN2935	III	FLAMMABLE LIQUID		150	203	
	Ethyl acetate	3	UN1173	II	FLAMMABLE LIQUID		150	202	
	Ethylacetylene, stabilized	2.1	UN2452		FLAMMABLE GAS		None	304	
	Ethyl acrylate, stabilized	3	UN1917	II	FLAMMABLE LIQUID		150	202	
	Ethyl alcohol, <i>see Ethanol</i>								
	<i>Ethyl aldehyde, see Acetaldehyde</i>								
	Ethylamine	2.1	UN1036		FLAMMABLE GAS		None	321	
	Ethylamine, aqueous solution with not less than 50 percent but not less than 70 percent ethylamine	3 (8)	UN2270	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	Ethyl amyl ketone	3	UN2271	III	FLAMMABLE LIQUID		150	203	
	N-Ethylaniline	6.1	UN2272	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	2-Ethylaniline	6.1	UN2273	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Ethylbenzene	3	UN1175	II	FLAMMABLE LIQUID		150	202	
	N-Ethylbenzyltoluidines liquid	6.1	UN2753	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	N-Ethylbenzyltoluidines solid	6.1	UN3460	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Ethyl borate	3	UN1176	II	FLAMMABLE LIQUID		150	202	
	Ethyl bromide	6.1	UN1891	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Ethyl bromoacetate	6.1 (3)	UN1603	II	POISON, FLAMMABLE LIQUID**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	2-Ethylbutanol	3	UN2275	III	FLAMMABLE LIQUID		150	203	
	2-Ethylbutyl acetate	3	UN1177	III	FLAMMABLE LIQUID		150	203	
	Ethyl butyl ether	3	UN1179	II	FLAMMABLE LIQUID		150	202	
	2-Ethylbutyraldehyde	3	UN1178	II	FLAMMABLE LIQUID		150	202	
	Ethyl butyrate	3	UN1180	III	FLAMMABLE LIQUID		150	203	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments								Packaging (\$173.***)	FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)	
	Ethyl chloride	2.1	UN1037		FLAMMABLE GAS		None	322		
	Ethyl chloroacetate	6.1 (3)	UN1181	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13	
	Ethyl chloroformate	6.1 (3,8)	UN1182	I	POISON, FLAMMABLE LIQUID, CORROSIVE	2,N34	None	227	Not Accepted by FedEx Ground	
+	Ethyl chlorothioformate	8 (6.1,3)	UN2826	II	CORROSIVE, POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground	
	Ethyl crotonate	3	UN1862	II	FLAMMABLE LIQUID		150	202		
	Ethyldichloroarsine	6.1	UN1892	I	POISON	2	None	227	Not Accepted by FedEx Ground	
	Ethyldichlorosilane	4.3 (8,3)	UN1183	I	DANGEROUS WHEN WET, CORROSIVE, FLAMMABLE LIQUID**	N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13	
	Ethylene	2.1	UN1962		FLAMMABLE GAS		306	304		
	Ethylene, acetylene and propylene mixtures, refrigerated liquid with a least 71.5 percent ethylene with not more than 22.5 percent acetylene and not more than 6 percent propylene	2.1	UN3138		FLAMMABLE GAS		None	304		
	Ethylene chlorohydrin	6.1 (3)	UN1135	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground	
	Ethylenediamine	8 (3)	UN1604	II	CORROSIVE, FLAMMABLE LIQUID		154	202		
	Ethylene diamine diperchlorate	Forbid- den								
	Ethylene dibromide	6.1	UN1605	I	POISON	2	None	227	Not Accepted by FedEx Ground	
	Ethylene dibromide and methyl bromide liquid mixtures, see Methyl bromide and ethylene dibromide, liquid mixtures									
	Ethylene dichloride	3 (6.1)	UN1184	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13	
	Ethylene glycol diethyl ether	3	UN1153	II	FLAMMABLE LIQUID		150	202		
	Ethylene glycol diethyl ether	3	UN1153	III	FLAMMABLE LIQUID		150	203		
	Ethylene glycol dinitrate	Forbid- den								
	Ethylene glycol monoethyl ether	3	UN1171	III	FLAMMABLE LIQUID		150	203		
	Ethylene glycol monoethyl ether acetate	3	UN1172	III	FLAMMABLE LIQUID		150	203		
	Ethylene glycol monomethyl ether	3	UN1188	III	FLAMMABLE LIQUID		150	203		
	Ethylene glycol monomethyl ether acetate	3	UN1189	III	FLAMMABLE LIQUID		150	203		
	Ethyleneimine, stabilized	6.1 (3)	UN1185	I	POISON, FLAMMABLE LIQUID	1, N25, N32	None	226	Not Accepted by FedEx Ground	
	Ethylene oxide and carbon dioxide mixtures with not more than 9 percent ethylene oxide	2.1	UN1041		FLAMMABLE GAS		306	304		
	Ethylene oxide and carbon dioxide mixtures with not more than 9 percent ethylene oxide	2.2	UN1952		NONFLAMMABLE GAS		306	304		
	Ethylene oxide and carbon dioxide mixture with more than 87 percent ethylene oxide	2.3 (2.1)	UN3300		POISON GAS, FLAMMABLE GAS	4	None	304	Not Accepted by FedEx Ground	
	Ethylene oxide and chlorotetrafluoroethane mixture with not more than 8.8 percent ethylene oxide	2.2	UN3297		NONFLAMMABLE GAS		306	304		
	Ethylene oxide and dichlorodifluoromethane mixture, with not more than 12.5 percent ethylene oxide	2.2	UN3070		NONFLAMMABLE GAS		306	304		
	Ethylene oxide and pentafluoroethane mixture with not more than 7.9 percent ethylene oxide	2.2	UN3298		NONFLAMMABLE GAS		306	304		
	Ethylene oxide and propylene oxide mixtures, with not more than 30 percent ethylene oxide	3 (6.1)	UN2983	I	FLAMMABLE LIQUID, POISON**	5,N4,N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13	
	Ethylene oxide and tetrafluoroethane mixture with not more than 5.6 percent ethylene oxide	2.2	UN3299		NONFLAMMABLE GAS		306	304		

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Ethylene oxide <i>or</i> Ethylene oxide with nitrogen up to a total pressure of 1MPa (10 bar) at 50 degrees C	2.3 (2.1)	UN1040		POISON GAS, FLAMMABLE GAS	4	None	323	Not Accepted by FedEx Ground
	Ethylene, refrigerated liquid ( <i>cryogenic liquid</i> )	2.1	UN1038		FLAMMABLE GAS		None	316	Not Accepted by FedEx Ground
	Ethyl ether, <i>see</i> Diethyl ether								
	Ethyl fluoride <i>or</i> Refrigerant gas R 161	2.1	UN2453		FLAMMABLE GAS		306	304	
	Ethyl formate	3	UN1190	II	FLAMMABLE LIQUID		150	202	
	<i>Ethylhexaldehyde, see</i> Octyl aldehydes <i>etc.</i>								
	2-Ethylhexylamine	3 (8)	UN2276	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	2-Ethylhexyl chloroformate	6.1 (8)	UN2748	II	POISON, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ethyl hydroperoxide</i>	Forbid- den							
	Ethyl isobutyrate	3	UN2385	II	FLAMMABLE LIQUID		150	202	
+	Ethyl isocyanate	3 (6.1)	UN2481	I	FLAMMABLE LIQUID, POISON	1	None	226	Not Accepted by FedEx Ground
	Ethyl lactate	3	UN1192	III	FLAMMABLE LIQUID		150	203	
	Ethyl mercaptan	3	UN2363	I	FLAMMABLE LIQUID		None	201	
	Ethyl methacrylate, stabilized	3	UN2277	II	FLAMMABLE LIQUID		150	202	
	Ethyl methyl ether	2.1	UN1039		FLAMMABLE GAS		None	201	
	Ethyl methyl ketone <i>or</i> Methyl ethyl ketone	3	UN1193	II	FLAMMABLE LIQUID		150	202	
	N-Ethyl-N-benzylaniline	6.1	UN2274	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Ethyl nitrite solutions	3 (6.1)	UN1194	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Ethyl orthoformate	3	UN2524	III	FLAMMABLE LIQUID		150	203	
	Ethyl oxalate	6.1	UN2525	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Ethyl perchlorate</i>	Forbid- den							
	Ethylphenyldichlorosilane	8	UN2435	II	CORROSIVE	N34	None	202	
D	Ethyl phosphonothioic dichloride, anhydrous	6.1 (8)	NA2927	I	POISON, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
D	Ethyl phosphonous dichloride, anhydrous <i>pyrophoric liquid</i>	6.1 (4.2)	NA2845	I	POISON, SPONTANEOUSLY COMBUSTIBLE	2	None	227	Not Accepted by FedEx Ground
D	Ethyl phosphorodichloridate	6.1 (8)	NA2927	I	POISON, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
	1-Ethylpiperidine	3 (8)	UN2386	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	Ethyl propionate	3	UN1195	II	FLAMMABLE LIQUID		150	202	
	Ethyl propyl ether	3	UN2615	II	FLAMMABLE LIQUID		150	202	
	<i>Ethyl silicate, see</i> Tetraethyl silicate								
	N-Ethyltoluidines	6.1	UN2754	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Ethyltrichlorosilane	3 (8)	UN1196	II	FLAMMABLE LIQUID, CORROSIVE	N34	150	202	
	<i>Etiologic agent, see</i> Infectious substances, <i>etc.</i>								
	<i>Explosive articles, see</i> Articles, explosive , n.o.s. <i>etc.</i>								
	Explosive, blasting, type A	1.1D	UN0081	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Explosive, blasting, type B	1.1D	UN0082	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Explosive, blasting, type B <i>or</i> Agent blasting, Type B	1.5D	UN0331	II	EXPLOSIVE 1.5D	105, 106	None	62	Not Accepted by FedEx Ground
	Explosive, blasting, type C	1.1D	UN0083	II	EXPLOSIVE 1.1D	123	None	62	Not Accepted by FedEx Ground
	Explosive, blasting, type D	1.1D	UN0084	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Explosive, blasting, type E	1.1D	UN0241	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Explosive, blasting, type E <i>or</i> Agent blasting, Type E	1.5D	UN0332	II	EXPLOSIVE 1.5D	105, 106	None	62	Not Accepted by FedEx Ground
	<i>Explosive, forbidden. See</i> Sec. 173.54	Forbid- den							

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Explosives, slurry, see Explosive, blasting, type E</i>								
	<i>Explosive substances, see Substances, explosive, n.o.s. etc.</i>								
	<i>Explosives, water gels, see Explosive, blasting, type E</i>								
	<b>Extracts, aromatic, liquid</b>	3	UN1169	II	FLAMMABLE LIQUID	149	150	202	
	<b>Extracts, aromatic, liquid</b>	3	UN1169	III	FLAMMABLE LIQUID		150	203	
	<b>Extracts, flavoring, liquid</b>	3	UN1197	II	FLAMMABLE LIQUID	149	150	202	
	<b>Extracts, flavoring, liquid</b>	3	UN1197	III	FLAMMABLE LIQUID		150	203	
	<i>Fabric with animal or vegetable oil, see Fibers or fabrics, etc.</i>								
	<b>Ferric arsenate</b>	6.1	UN1606	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Ferric arsenite</b>	6.1	UN1607	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Ferric chloride, anhydrous</b>	8	UN1773	III	CORROSIVE		154	213	
	<b>Ferric chloride, solution</b>	8	UN2582	III	CORROSIVE		154	203	
	<b>Ferric nitrate</b>	5.1	UN1466	III	OXIDIZER		152	213	
	<b>Ferrocium</b>	4.1	UN1323	II	FLAMMABLE SOLID	59	151	212	
	<b>Ferrosilicon, with 30 percent or more but less than 90 percent silicon</b>	4.3 (6.1)	UN1408	III	DANGEROUS WHEN WET, POISON**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<b>Ferrous arsenate</b>	6.1	UN1608	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	<b>Ferrous chloride, solid</b>	8	NA1759	II	CORROSIVE		154	212	
D	<b>Ferrous chloride, solution</b>	8	NA1760	II	CORROSIVE		154	202	
	<b>Ferrous metal borings or Ferrous metal shavings or Ferrous metal turnings or Ferrous metal cuttings in a form liable to self-heating</b>	4.2	UN2793	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	<b>Fertilizer ammoniating solution with free ammonia</b>	2.2	UN1043		NONFLAMMABLE GAS		306	304	
AIW	<b>Fibers, animal or Fibers, vegetable burnt, wet or damp</b>	4.2	UN1372	III	SPONTANEOUSLY COMBUSTIBLE		151	213	May not be regulated via highway
AIW	<b>Fibers or Fabrics, animal or vegetable or Synthetic, n.o.s. with animal or vegetable oil</b>	4.2	UN1373	III	SPONTANEOUSLY COMBUSTIBLE	137	None	213	May not be regulated via highway
	<b>Fibers or Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s.</b>	4.1	UN1353	III	FLAMMABLE SOLID		None	213	
IW	<b>Fibers, vegetable, dry</b>	4.1	UN3360	III	FLAMMABLE SOLID	137	151	213	
	<i>Films, nitrocellulose base, from which gelatine has been removed; film scrap, see Celluloid scrap</i>								
	<b>Films, nitrocellulose base, gelatine coated (except scrap)</b>	4.1	UN1324	III	FLAMMABLE SOLID		None	183	
	<b>Fire extinguisher charges, corrosive liquid</b>	8	UN1774	II	CORROSIVE	N41	154	202	
	<i>Fire extinguisher charges, expelling, explosive, see Cartridges, power device</i>								
	<b>Fire extinguishers containing compressed or liquefied gas</b>	2.2	UN1044		NONFLAMMABLE GAS	18, 110	309	309	
	<b>Firelighters, solid with flammable liquid</b>	4.1	UN2623	III	FLAMMABLE SOLID		None	213	
	<b>Fireworks</b>	1.1G	UN0333	II	EXPLOSIVE 1.1G	108	None	62	Not Accepted by FedEx Ground
	<b>Fireworks</b>	1.2G	UN0334	II	EXPLOSIVE 1.2G	108	None	62	Not Accepted by FedEx Ground
	<b>Fireworks</b>	1.3G	UN0335	II	EXPLOSIVE 1.3G	108	None	62	Not Accepted by FedEx Ground
	<b>Fireworks</b>	1.4G	UN0336	II	EXPLOSIVE 1.4G	108	None	62	Not Accepted by FedEx Ground
	<b>Fireworks</b>	1.4S	UN0337	II	EXPLOSIVE 1.4S	108	None	62	Not Accepted by FedEx Ground
	<b>First aid kits</b>	9	UN3316		CLASS 9	15	161	161	See Special Provision 15
W	<b>Fish meal, stabilized or Fish scrap, stabilized</b>	9	UN2216	III	NONE	155	155	218	May not be regulated via highway
	<b>Fish meal, unstabilized or Fish scrap, unstabilized</b>	4.2	UN1374	II	SPONTANEOUSLY COMBUSTIBLE	155	None	212	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Fissile radioactive materials, see Radioactive material, fissile, n.o.s.</b>								
	<i>Flammable compressed gas, see Compressed or Liquefied gas, flammable, etc.</i>								
	<i>Flammable compressed gas (small receptacles not fitted with a dispersion device, not refillable), see Receptacles, etc.</i>								
	<i>Flammable gas in lighters, see Lighters or Lighter refills, cigarettes, containing flammable gas</i>								
G	<b>Flammable liquids, corrosive, n.o.s.</b>	3 (8)	UN2924	I	FLAMMABLE LIQUID, CORROSIVE		None	201	
G	<b>Flammable liquids, corrosive, n.o.s.</b>	3 (8)	UN2924	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
G	<b>Flammable liquids, corrosive, n.o.s.</b>	3 (8)	UN2924	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
G	<b>Flammable liquids, n.o.s.</b>	3	UN1993	I	FLAMMABLE LIQUID		150	201	
G	<b>Flammable liquids, n.o.s.</b>	3	UN1993	II	FLAMMABLE LIQUID		150	202	
G	<b>Flammable liquids, n.o.s.</b>	3	UN1993	III	FLAMMABLE LIQUID		150	203	
G	<b>Flammable liquids, toxic, n.o.s.</b>	3 (6.1)	UN1992	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Flammable liquids, toxic, n.o.s.</b>	3 (6.1)	UN1992	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Flammable liquids, toxic, n.o.s.</b>	3 (6.1)	UN1992	III	FLAMMABLE LIQUID, POISON**		150	203	Accepted only when packaged under applicable special permit, 49CFR 173.13
G	<b>Flammable liquid, toxic, corrosive, n.o.s.</b>	3 (6.1.8)	UN3286	I	FLAMMABLE LIQUID, POISON, CORROSIVE**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Flammable liquid, toxic, corrosive, n.o.s.</b>	3 (6.1.8)	UN3286	II	FLAMMABLE LIQUID, POISON, CORROSIVE**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Flammable solid, corrosive, inorganic, n.o.s.</b>	4.1 (8)	UN3180	II	FLAMMABLE SOLID, CORROSIVE		151	212	
G	<b>Flammable solid, corrosive, inorganic, n.o.s.</b>	4.1 (8)	UN3180	III	FLAMMABLE SOLID, CORROSIVE		151	213	
G	<b>Flammable solid, inorganic, n.o.s.</b>	4.1	UN3178	II	FLAMMABLE SOLID		151	212	
G	<b>Flammable solid, inorganic, n.o.s.</b>	4.1	UN3178	III	FLAMMABLE SOLID		151	213	
G	<b>Flammable solid, organic, molten, n.o.s.</b>	4.1	UN3176	II	FLAMMABLE SOLID		151	212	Not Accepted by FedEx Ground
G	<b>Flammable solid, organic, molten, n.o.s.</b>	4.1	UN3176	III	FLAMMABLE SOLID		151	213	Not Accepted by FedEx Ground
G	<b>Flammable solid, oxidizing, n.o.s.</b>	4.1 (5.1)	UN3097	II	FLAMMABLE SOLID, OXIDIZER	131	None	214	Not Accepted by FedEx Ground
G	<b>Flammable solid, oxidizing, n.o.s.</b>	4.1 (5.1)	UN3097	III	FLAMMABLE SOLID, OXIDIZER	131	None	214	Not Accepted by FedEx Ground
G	<b>Flammable solids, corrosive, organic, n.o.s.</b>	4.1 (8)	UN2925	II	FLAMMABLE SOLID, CORROSIVE		None	212	
G	<b>Flammable solids, corrosive, organic, n.o.s.</b>	4.1 (8)	UN2925	III	FLAMMABLE SOLID, CORROSIVE		151	213	
G	<b>Flammable solids, organic, n.o.s.</b>	4.1	UN1325	II	FLAMMABLE SOLID		151	212	
G	<b>Flammable solids, organic, n.o.s.</b>	4.1	UN1325	III	FLAMMABLE SOLID		151	213	
G	<b>Flammable solids, toxic, organic, n.o.s.</b>	4.1 (6.1)	UN2926	II	FLAMMABLE SOLID, POISON**		151	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Flammable solids, toxic, organic, n.o.s.</b>	4.1 (6.1)	UN2926	III	FLAMMABLE SOLID, POISON**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13
G	<b>Flammable solid, toxic, inorganic, n.o.s.</b>	4.1 (6.1)	UN3179	II	FLAMMABLE SOLID, POISON**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13
G	<b>Flammable solid, toxic, inorganic, n.o.s.</b>	4.1 (6.1)	UN3179	III	FLAMMABLE SOLID, POISON**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13
	<b>Flares, aerial</b>	1.2G	UN0421	II	EXPLOSIVE 1.2G		None	62	Not Accepted by FedEx Ground
	<b>Flares, aerial</b>	1.3G	UN0093	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	<b>Flares, aerial</b>	1.4G	UN0403	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Flares, aerial</b>	1.4S	UN0404	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Flares, aerial</b>	1.1G	UN0420	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	<i>Flares, airplane, see Flares, aerial</i>								
	<i>Flares, signal, see Cartridges, signal</i>								
	<b>Flares, surface</b>	1.1G	UN0418	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	<b>Flares, surface</b>	1.2G	UN0419	II	EXPLOSIVE 1.2G		None	62	Not Accepted by FedEx Ground
	<b>Flares, surface</b>	1.3G	UN0092	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	<i>Flares, water-activated, see Contrivances, water-activated, etc.</i>								
	<b>Flash powder</b>	1.1G	UN0094	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	<b>Flash powder</b>	1.3G	UN0305	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	<i>Flue dusts, poisonous, see Arsenical dust</i>								
	<i>Fluoric acid, see Hydrofluoric acid, solution, etc.</i>								
	<b>Fluorine, compressed</b>	2.3 (5.1,8)	UN1045		POISON GAS, OXIDIZER, CORROSIVE	1	None	302	Not Accepted by FedEx Ground
	<b>Fluoroacetic acid</b>	6.1	UN2642	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Fluoroanilines</b>	6.1	UN2941	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Fluorobenzene</b>	3	UN2387	II	FLAMMABLE LIQUID		150	202	
	<b>Fluoroboric acid</b>	8	UN1775	II	CORROSIVE	N3,N34	154	202	
	<b>Fluorophosphoric acid anhydrous</b>	8	UN1776	II	CORROSIVE	N3,N34	None	202	
	<b>Fluorosilicates, n.o.s.</b>	6.1	UN2856	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Fluorosilicic acid</b>	8	UN1778	II	CORROSIVE	N3,N34	None	202	
	<b>Fluorosulfonic acid</b>	8	UN1777	I	CORROSIVE	N3	None	201	
	<b>Fluorotoluenes</b>	3	UN2388	II	FLAMMABLE LIQUID		150	202	
	<i>Forbidden materials. See 173.21</i>	Forbid- den							
	<b>Formaldehyde, solutions, flammable</b>	3 (8)	UN1198	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	<b>Formaldehyde, solutions, with not less than 25 percent formaldehyde</b>	8	UN2209	III	CORROSIVE		154	203	
	<i>Formalin, see Formaldehyde, solutions</i>								
	<b>Formic acid</b>	8	UN1779	II	CORROSIVE		154	202	
	<b>Fracturing devices, explosive, without detonators for oil wells</b>	1.1D	UN0099	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Fuel, aviation, turbine engine</b>	3	UN1863	I	FLAMMABLE LIQUID	144	150	201	
	<b>Fuel, aviation, turbine engine</b>	3	UN1863	II	FLAMMABLE LIQUID	144	150	202	
	<b>Fuel, aviation, turbine engine</b>	3	UN1863	III	FLAMMABLE LIQUID	144	150	203	
D	<b>Fuel oil (No. 1,2,4,5, or 6)</b>	3	NA1993	III	FLAMMABLE LIQUID	144	150	203	
	<i>Fuel system components (including fuel control units (FCU), carburetors, fuel lines, fuel pumps) see Dangerous Goods in Apparatus or Dangerous Goods in Machinery</i>								
	<b>Fulminate of mercury (dry)</b>	Forbid- den							
	<i>Fulminate of mercury, wet, see Mercury fulminate, etc.</i>								
	<b>Fulminating gold</b>	Forbid- den							
	<b>Fulminating mercury</b>	Forbid- den							
	<b>Fulminating platinum</b>	Forbid- den							
	<b>Fulminating silver</b>	Forbid- den							
	<b>Fulminic acid</b>	Forbid- den							
	<b>Fumaryl chloride</b>	8	UN1780	II	CORROSIVE		154	202	
	<i>Fumigated lading, see 172.302(g), 173.9 and 176.76(h)</i>								
	<i>Fumigated transport vehicle or freight container see 173.9</i>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Furaldehydes</b>	6.1 (3)	UN1199	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Furan</b>	3	UN2389	I	FLAMMABLE LIQUID		None	201	
	<b>Furfuryl alcohol</b>	6.1	UN2874	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Furfurylamine</b>	3 (8)	UN2526	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	<i>Fuse, detonating, metal clad, see Cord, detonating, metal clad</i>								
	<i>Fuse, detonating, mild effect, metal clad, see Cord, detonating, mild effect, metal clad</i>								
D	<b>Fusee (railway or highway)</b>	4.1	NA1325	II	FLAMMABLE SOLID		None	184	
	<b>Fuse, igniter tubular metal clad</b>	1.4G	UN0103	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Fusel oil</b>	3	UN1201	II	FLAMMABLE LIQUID		150	202	
	<b>Fusel oil</b>	3	UN1201	III	FLAMMABLE LIQUID		150	203	
	<b>Fuse, non-detonating (instantaneous or quickmatch)</b>	1.3G	UN0101	II	EXPLOSIVE 1.3G		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Fuse, safety</b>	1.4S	UN0105	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Fuses, tracer, see Tracers for ammunition</i>								
	<i>Fuzes, combination, percussion and time, see Fuzes, detonating (UN 0257, UN 0367); Fuzes, igniting (UN 0317, UN0368)</i>								
	<b>Fuzes, detonating</b>	1.1B	UN0106	II	EXPLOSIVE 1.1B		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Fuzes, detonating</b>	1.2B	UN0107	II	EXPLOSIVE 1.2B		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Fuzes, detonating</b>	1.4B	UN0257	II	EXPLOSIVE 1.4B	116	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Fuzes, detonating</b>	1.4S	UN0367	II	EXPLOSIVE 1.4S	116	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Fuzes, detonating, with protective features</b>	1.1D	UN0408	II	EXPLOSIVE 1.1D		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Fuzes, detonating, with protective features</b>	1.2D	UN0409	II	EXPLOSIVE 1.2D		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Fuzes, detonating, with protective features</b>	1.4D	UN0410	II	EXPLOSIVE 1.4D	116	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Fuzes, igniting</b>	1.3G	UN0316	II	EXPLOSIVE 1.3G		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Fuzes, igniting</b>	1.4G	UN0317	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Fuzes, igniting</b>	1.4S	UN0368	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Galactsan trinitrate</i>	Forbid- den							
	<b>Gallium</b>	8	UN2803	III	CORROSIVE		None	162	
	<b>Gas cartridges, (flammable) without a release device, non-refillable</b>	2.1	UN2037		FLAMMABLE GAS		306	304	
	<b>Gas generator assemblies (aircraft), containing a non-flammable non-toxic gas and a propellant cartridge</b>	2.2			NONFLAMMABLE GAS		None	335	
D	<b>Gas identification set</b>	2.3	NA9035		POISON GAS	6	None	194	<b>Not Accepted by FedEx Ground</b>
D	<b>Gasohol gasoline mixed with ethyl alcohol, with not more than 20 percent alcohol</b>	3	NA1203	II	FLAMMABLE LIQUID	144	150	202	
	<b>Gas oil</b>	3	UN1202	III	FLAMMABLE LIQUID	144	150	203	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Gasoline</b>	3	UN1203	II	FLAMMABLE LIQUID	144	150	202	
	<i>Gasoline, casinghead, see Gasoline</i>								
G	<b>Gas, refrigerated liquid, flammable, n.o.s. (cryogenic liquid)</b>	2.1	UN3312		FLAMMABLE GAS		None	316	<b>Not Accepted by FedEx Ground</b>
G	<b>Gas, refrigerated liquid, n.o.s. (cryogenic liquid)</b>	2.2	UN3158		NONFLAMMABLE GAS		320	316	Accepted only when packaged under exception 49CFR 173.320
G	<b>Gas, refrigerated liquid, oxidizing, n.o.s. (cryogenic liquid)</b>	2.2 (5.1)	UN3311		NONFLAMMABLE GAS, OXIDIZER		320	316	Accepted only when packaged under exception 49CFR 173.320
	<b>Gas sample, non-pressurized, flammable, n.o.s., not refrigerated liquid</b>	2.1	UN3167		FLAMMABLE GAS		306	302, 304	
	<b>Gas sample, non-pressurized, toxic, flammable, n.o.s., not refrigerated liquid</b>	2.3 (2.1)	UN3168		POISON GAS, FLAMMABLE GAS	6	306	302	<b>Not Accepted by FedEx Ground</b>
	<b>Gas sample, non-pressurized, toxic, n.o.s., not refrigerated liquid</b>	2.3	UN3169		POISON GAS	6	306	302, 304	<b>Not Accepted by FedEx Ground</b>
	<i>Gelatine, blasting, see Explosive, blasting, type A</i>								
	<i>Gelatine dynamites, see Explosive, blasting, type A</i>								
	<b>Germane</b>	2.3 (2.1)	UN2192		POISON GAS, FLAMMABLE GAS	2	None	302	<b>Not Accepted by FedEx Ground</b>
	<i>Glycerol-1,3-dinitrate</i>	Forbid- den							
	<b>Glycerol alpha-monochlorohydrin</b>	6.1	UN2689	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Glycerol gluconate trinitrate</i>	Forbid- den							
	<i>Glycerol lactate trinitrate</i>	Forbid- den							
	<i>Glyceryl trinitrate, see Nitroglycerin, etc.</i>								
	<b>Glycidaldehyde</b>	3 (6.1)	UN2622	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Grenades, hand or rifle, with bursting charge</b>	1.1D	UN0284	II	EXPLOSIVE 1.1D		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Grenades, hand or rifle, with bursting charge</b>	1.2D	UN0285	II	EXPLOSIVE 1.2D		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Grenades, hand or rifle, with bursting charge</b>	1.1F	UN0292	II	EXPLOSIVE 1.1F		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Grenades, hand or rifle, with bursting charge</b>	1.2F	UN0293	II	EXPLOSIVE 1.2F		None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Grenades, illuminating, see Ammunition, illuminating, etc.</i>								
	<b>Grenades, practice, hand or rifle 1.</b>	1.4S	UN0110	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Grenades, practice, hand or rifle 1.</b>	1.3G	UN0318	II	EXPLOSIVE 1.3G		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Grenades, practice, hand or rifle 1.</b>	1.2G	UN0372	II	EXPLOSIVE 1.2G		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Grenades, practice, Hand or rifle</b>	1.4G	UN0452	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Grenades, smoke, see Ammunition, smoke, etc.</i>								
	<b>Guanidine nitrate</b>	5.1	UN1467	III	OXIDIZER		152	213	
	<i>Guanyl nitrosaminoguanilylidene hydrazine (dry)</i>	Forbid- den							
	<b>Guanyl nitrosaminoguanilylidene hydrazine, wetted with not less than 30 percent water, by mass</b>	1.1A	UN0113	II	EXPLOSIVE 1.1A	111, 117	None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Guanyl nitrosaminoguanilyltetrazene (dry)</i>	Forbid- den							
	<b>Guanyl nitrosaminoguanilylidene hydrazine, wetted or Tetrazene, wetted with not less than 30 percent water or mixture of alcohol and water, by mass</b>	1.1A	UN0114	II	EXPLOSIVE 1.1A	111, 117	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Gunpowder, compressed or Gunpowder in pellets, see Black powder (UN0028)</b>								
	<b>Gunpowder, granular or as a meal, see Black powder (UN0027)</b>								
	<b>Hafnium powder, dry</b>	4.2	UN2545	I	SPONTANEOUSLY COMBUSTIBLE		None	211	<b>Not Accepted by FedEx Ground</b>

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Hafnium powder, dry</b>	4.2	UN2545	II	SPONTANEOUSLY COMBUSTIBLE	N34	None	212	<b>Not Accepted by FedEx Ground</b>
	<b>Hafnium powder, dry</b>	4.2	UN2545	III	SPONTANEOUSLY COMBUSTIBLE		None	213	<b>Not Accepted by FedEx Ground</b>
	<b>Hafnium powder, wetted</b> with not less than 25 percent water ( a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns	4.1	UN1326	II	FLAMMABLE SOLID	N34	None	212	
	<i>Hand signal device, see Signal devices, hand</i>								
	<i>Hazardous substances, liquid or solid, n.o.s., see Environmentally hazardous substances, etc.</i>								
D,G	<b>Hazardous waste, liquid, n.o.s.</b>	9	NA3082	III	CLASS 9		155	203	<b>Not Accepted by FedEx Ground</b>
D,G	<b>Hazardous waste, solid, n.o.s.</b>	9	NA3077	III	CLASS 9		155	213	<b>Not Accepted by FedEx Ground</b>
	<b>Heating oil, light</b>	3	UN1202	III	FLAMMABLE LIQUID		150	203	
	<b>Helium, compressed</b>	2.2	UN1046		NONFLAMMABLE GAS		306	302	
	<i>Helium-oxygen mixture, see Rare gases and oxygen mixtures</i>								
	<b>Helium, refrigerated liquid</b> (cryogenic liquid)	2.2	UN1963		NONFLAMMABLE GAS**		320	316	Accepted only when packaged under exception 173.320
	<b>Heptafluoropropane or Refrigerant gas R 227</b>	2.2	UN3296		NONFLAMMABLE GAS		306	304	
	<b>n-Heptaldehyde</b>	3	UN3056	III	FLAMMABLE LIQUID		150	203	
	<b>Heptanes</b>	3	UN1206	II	FLAMMABLE LIQUID		150	202	
	<b>n-Heptene</b>	3	UN2278	II	FLAMMABLE LIQUID		150	202	
	<b>Hexachloroacetone</b>	6.1	UN2661	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hexachlorobenzene</b>	6.1	UN2729	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hexachlorobutadiene</b>	6.1	UN2279	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hexachlorocyclopentadiene</b>	6.1	UN2646	I	POISON	2	None	227	<b>Not Accepted by FedEx Ground</b>
	<b>Hexachlorophene</b>	6.1	UN2875	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hexadecyltrichlorosilane</b>	8	UN1781	II	CORROSIVE	N34	None	202	
	<b>Hexadienes</b>	3	UN2458	II	FLAMMABLE LIQUID		None	202	
	<b>Hexaethyl tetraphosphate and compressed gas mixtures</b>	2.3	UN1612		POISON GAS	3	None	334	<b>Not Accepted by FedEx Ground</b>
	<b>Hexaethyl tetraphosphate liquid</b>	6.1	UN1611	II	POISON**	N76	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hexaethyl tetraphosphate solid</b>	6.1	UN1611	II	POISON**	N76	None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hexafluoroacetone</b>	2.3 (8)	UN2420		POISON GAS, CORROSIVE	2	None	304	<b>Not Accepted by FedEx Ground</b>
	<b>Hexafluoroacetone hydrate, liquid</b>	6.1	UN2552	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hexafluoroacetone hydrate, solid</b>	6.1	UN3436	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hexafluoroethane or Refrigerant gas R 116</b>	2.2	UN2193		NONFLAMMABLE GAS		306	304	
	<b>Hexafluorophosphoric acid</b>	8	UN1782	II	CORROSIVE	N3,N34	None	202	
	<b>Hexafluoropropylene, compressed or Refrigerant gas R 1216</b>	2.2	UN1858		NONFLAMMABLE GAS		306	304	
	<b>Hexaldehyde</b>	3	UN1207	III	FLAMMABLE LIQUID		150	203	
	<b>Hexamethylenediamine, solid</b>	8	UN2280	III	CORROSIVE		154	213	
	<b>Hexamethylenediamine solution</b>	8	UN1783	II	CORROSIVE		None	202	
	<b>Hexamethylenediamine solution</b>	8	UN1783	III	CORROSIVE		154	203	
	<b>Hexamethylene diisocyanate</b>	6.1	UN2281	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Hexamethyleneimine</b>	3(8)	UN2493	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>Hexamethylenetetramine</b>	4.1	UN1328	III	FLAMMABLE SOLID		151	213	
	<i>Hexamethylene triperoxide diamine (dry)</i>	Forbid- den							
	<i>Hexamethylol benzene hexanitrate</i>	Forbid- den							
	<b>Hexanes</b>	3	UN1208	II	FLAMMABLE LIQUID		150	202	
	<i>2,2',4,4',6,6'-Hexanitro-3,3'-dihydroxyazobenzene (dry)</i>	Forbid- den							
	<i>Hexanitroazoxy benzene</i>	Forbid- den							
	<i>2,2',3',4,4',6-Hexanitrodiphenylamine</i>	Forbid- den							
	<b>Hexanitrodiphenylamine or Dipicrylamine or Hexyl</b>	1.1D	UN0079	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>2,3',4,4',6,6'-Hexanitrodiphenylether</i>	Forbid- den							
	<i>N,N'-(hexanitrodiphenyl) ethylene dinitramine (dry)</i>	Forbid- den							
	<i>Hexanitrodiphenyl urea</i>	Forbid- den							
	<i>Hexanitroethane</i>	Forbid- den							
	<i>Hexanitrooxanilide</i>	Forbid- den							
	<b>Hexanitrostilbene</b>	1.1D	UN0392	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>Hexanoic acid, see Corrosive liquids, n.o.s.</i>								
	<b>Hexanols</b>	3	UN2282	III	FLAMMABLE LIQUID		150	203	
	<b>1-Hexene</b>	3	UN2370	II	FLAMMABLE LIQUID		150	202	
	<b>Hexogen and cyclotetramethylenetetranitramine mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.</b>								
	<b>Hexogen and HMX mixtures wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.</b>								
	<b>Hexogen and octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.</b>								
	<b>Hexogen, see Cyclotrimethylenetrinitramine, etc.</b>								
	<b>Hexolite, or Hexotol dry or wetted with less than 15 percent water, by mass</b>	1.1D	UN0118	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Hexotonal</b>	1.1D	UN0393	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Hexyl, see Hexanitrodiphenylamine</b>								
	<b>Hexyltrichlorosilane</b>	8	UN1784	II	CORROSIVE	N34	None	202	
	<i>High explosives, see individual explosives' entries</i>								
	<b>HMX, see Cyclotetramethylenetetranitramine, etc.</b>								
	<b>Hydrazine, anhydrous</b>	8 (3, 6.1)	UN2029	I	CORROSIVE, FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hydrazine aqueous solutions with more than 37% hydrazine, by mass</b>	8 (6.1)	UN2030	I	CORROSIVE, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hydrazine aqueous solutions with more than 37% hydrazine, by mass</b>	8 (6.1)	UN2030	II	CORROSIVE, POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hydrazine aqueous solutions with more than 37% hydrazine, by mass</b>	8 (6.1)	UN2030	III	CORROSIVE, POISON**		None	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hydrazine, aqueous solution with not more than 37 percent hydrazine, by mass</b>	6.1	UN3293	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Hydrazine azide</i>	Forbid- den							
	<i>Hydrazine chlorate</i>	Forbid- den							
	<i>Hydrazine dicarbonic acid diazide</i>	Forbid- den							
	<i>Hydrazine perchlorate</i>	Forbid- den							

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Hydrazine selenate</i>	Forbid- den							
	<b>Hydriodic acid</b>	8	UN1787	II	CORROSIVE	N41	154	202	
	<b>Hydriodic acid</b>	8	UN1787	III	CORROSIVE		154	203	
	<i>Hydriodic acid, anhydrous, see Hydrogen iodide, anhydrous</i>								
	<i>Hydrobromic acid, anhydrous, see Hydrogen bromide, anhydrous</i>								
	<b>Hydrobromic acid, with more than 49 percent hydrobromic acid</b>	8	UN1788	II	CORROSIVE	N41	154	202	
	<i>Hydrobromic acid, with more than 49 percent hydrobromic acid</i>	8	UN1788	III	CORROSIVE		154	203	
	<i>Hydrobromic acid, with not more than 49 percent hydrobromic acid</i>	8	UN1788	II	CORROSIVE	N41	154	202	
	<i>Hydrobromic acid, with not more than 49 percent hydrobromic acid</i>	8	UN1788	III	CORROSIVE		154	203	
	<b>Hydrocarbon gas mixture, compressed, n.o.s.</b>	2.1	UN1964		FLAMMABLE GAS		306	302	
	<b>Hydrocarbon gas mixture, liquefied, n.o.s.</b>	2.1	UN1965		FLAMMABLE GAS		306	304	
	<b>Hydrocarbons, liquid, n.o.s.</b>	3	UN3295	I	FLAMMABLE LIQUID		150	201	
	<i>Hydrocarbons, liquid, n.o.s.</i>	3	UN3295	II	FLAMMABLE LIQUID		150	202	
	<i>Hydrocarbons, liquid, n.o.s.</i>	3	UN3295	III	FLAMMABLE LIQUID		150	203	
	<b>Hydrochloric acid</b>	8	UN1789	II	CORROSIVE	N41	154	202	
	<b>Hydrochloric acid</b>	8	UN1789	III	CORROSIVE		154	203	
	<i>Hydrochloric acid, anhydrous, see Hydrogen chloride, anhydrous</i>								
	<i>Hydrocyanic acid, anhydrous, see Hydrogen cyanide etc.</i>								
	<b>Hydrocyanic acid, aqueous solutions or hydrogen cyanide, aqueous solutions with not more than 20 percent hydrogen cyanide</b>	6.1	UN1613	I	POISON	2	None	195	<b>Not Accepted by FedEx Ground</b>
D	<b>Hydrocyanic acid, aqueous solutions with less than 5 percent hydrogen cyanide</b>	6.1	NA1613	II	POISON**		None	195	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Hydrocyanic acid, liquefied, see Hydrogen cyanide, etc.</i>								
	<i>Hydrocyanic acid (prussic), unstabilized</i>	Forbid- den							
	<b>Hydrofluoric acid and Sulfuric acid mixtures</b>	8 (6.1)	UN1786	I	CORROSIVE, POISON**	N5,N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Hydrofluoric acid, anhydrous, see Hydrogen fluoride, anhydrous</i>								
	<b>Hydrofluoric acid, with more than 60 percent strength</b>	8 (6.1)	UN1790	I	CORROSIVE, POISON**	N5,N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hydrofluoric acid, with not more than 60 percent strength</b>	8 (6.1)	UN1790	II	CORROSIVE, POISON**	N5,N34	None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Hydrofluoroboric acid, see Fluoboric acid</i>								
	<i>Hydrofluorosilicic acid, se e Fluorosilicic acid</i>								
	<b>Hydrogen and Methane mixtures, compressed</b>	2.1	UN2034		FLAMMABLE GAS		306	302	
	<b>Hydrogen bromide, anhydrous</b>	2.3 (8)	UN1048		POISON GAS, CORROSIVE	3	None	304	<b>Not Accepted by FedEx Ground</b>
	<b>Hydrogen chloride, anhydrous</b>	2.3 (8)	UN1050		POISON GAS, CORROSIVE	3	None	304	<b>Not Accepted by FedEx Ground</b>
	<b>Hydrogen chloride, refrigerated liquid</b>	2.3 (8)	UN2186		POISON GAS, CORROSIVE	3	None	None	<b>Not Accepted by FedEx Ground</b>
	<b>Hydrogen, compressed</b>	2.1	UN1049		FLAMMABLE GAS		306	302	
	<b>Hydrogen cyanide, solution in alcohol with not more than 45 percent hydrogen cyanide</b>	6.1 (3)	UN3294	I	POISON, FLAMMABLE LIQUID	2	None	227	<b>Not Accepted by FedEx Ground</b>
	<b>Hydrogen cyanide, stabilized with less than 3 percent water</b>	6.1 (3)	UN1051	I	POISON, FLAMMABLE LIQUID	1	None	195	<b>Not Accepted by FedEx Ground</b>
	<b>Hydrogen cyanide, stabilized, with less than 3 percent water and absorbed in a porous inert material</b>	6.1	UN1614	I	POISON**	5	None	195	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hydrogendifluorides, n.o.s.</b>	8	UN1740	II	CORROSIVE	N3,N34	None	212	
	<b>Hydrogendifluorides, n.o.s.</b>	8	UN1740	III	CORROSIVE	N3,N34	154	213	
	<b>Hydrogen fluoride, anhydrous</b>	8 (6.1)	UN1052	I	CORROSIVE, POISON	3	None	163	<b>Not Accepted by FedEx Ground</b>
	<b>Hydrogen in a metal hydride storage system</b>	2.1	UN3468		FLAMMABLE GAS	167	None	214	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Hydrogen iodide, anhydrous</b>	2.3	UN2197		POISON GAS	3	None	304	Not Accepted by FedEx Ground
	<i>Hydrogen iodide solution, see Hydriodic acid</i>								
	<b>Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water and not more than 5 percent peroxyacetic acid</b>	5.1 (8)	UN3149	II	OXIDIZER, CORROSIVE	145	None	202	
	<b>Hydrogen peroxide, aqueous solutions with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)</b>	5.1 (8)	UN2014	II	OXIDIZER, CORROSIVE	12	None	202	
	<b>Hydrogen peroxide, aqueous solutions with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)</b>	5.1 (8)	UN2014	II	OXIDIZER, CORROSIVE		None	202	
	<b>Hydrogen peroxide, aqueous solutions with not less than 8 percent but less than 20 percent hydrogen peroxide (stabilized as necessary)</b>	5.1	UN2984	III	OXIDIZER		152	203	
	<b>Hydrogen peroxide, stabilized or Hydrogen peroxide aqueous solutions, stabilized with more than 60 percent hydrogen peroxide</b>	5.1 (8)	UN2015	I	OXIDIZER, CORROSIVE	12	None	201	
	<b>Hydrogen, refrigerated liquid (cryogenic liquid)</b>	2.1	UN1966		FLAMMABLE GAS		None	316	Not Accepted by FedEx Ground
	<b>Hydrogen selenide, anhydrous</b>	2.3 (2.1)	UN2202		POISON GAS, FLAMMABLE GAS	1	None	192	Not Accepted by FedEx Ground
	<i>Hydrogen sulfate, see Sulfuric acid</i>								
	<b>Hydrogen sulfide</b>	2.3 (2.1)	UN1053		POISON GAS, FLAMMABLE GAS	2	None	304	Not Accepted by FedEx Ground
	<b>Hydroquinone, solid</b>	6.1	UN2662	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Hydroquinone solution</b>	6.1	UN3435	III	POISON**		153	203	
	<i>Hydrosilicofluoric acid, see Fluorosilicic acid</i>								
	<i>Hydroxyl amine iodide</i>	Forbid- den							
	<b>Hydroxylamine sulfate</b>	8	UN2865	III	CORROSIVE		154	213	
	<b>Hypochlorites, inorganic, n.o.s.</b>	5.1	UN3212	II	OXIDIZER		152	212	
	<b>Hypochlorite solutions</b>	8	UN1791	II	CORROSIVE	N34	154	202	
	<b>Hypochlorite solutions</b>	8	UN1791	III	CORROSIVE	N34	154	203	
	<i>Hyponitrous acid</i>	Forbid- den							
	<i>Igniter fuse, metal clad, see Fuse, igniter, tubular, metal clad</i>								
	<b>Igniters</b>	1.1G	UN0121	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	<b>Igniters</b>	1.2G	UN0314	II	EXPLOSIVE 1.2G		None	62	Not Accepted by FedEx Ground
	<b>Igniters</b>	1.3G	UN0315	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	<b>Igniters</b>	1.4G	UN0325	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Igniters</b>	1.4S	UN0454	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>3,3'-Iminodipropylamine</b>	8	UN2269	III	CORROSIVE		154	203	
G	<b>Infectious substances, affecting animals only</b>	6.2	UN2900		INFECTIOUS SUBSTANCE		134	196	Not Accepted by FedEx Ground
G	<b>Infectious substances, affecting humans</b>	6.2	UN2814		INFECTIOUS SUBSTANCE		134	196	Not Accepted by FedEx Ground
	<i>Inflammable, see Flammable</i>								
	<i>Initiating explosives (dry)</i>	Forbid- den							
	<i>Inositol hexanitrate (dry)</i>	Forbid- den							
G	<b>Insecticide gases, n.o.s.</b>	2.2	UN1968		NONFLAMMABLE GAS		306	304	
G	<b>Insecticide gases, flammable, n.o.s.</b>	2.1	UN3354		FLAMMABLE GAS		306	304	
G	<b>Insecticide gases, toxic, flammable, n.o.s. Inhalation Hazard Zone A</b>	2.3 (2.1)	UN3355		POISON GAS, FLAMMABLE GAS	1	None	192	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Insecticide gases, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone B</i>	2.3 (2.1)	UN3355		POISON GAS, FLAMMABLE GAS	2	None	302305	Not Accepted by FedEx Ground
G	Insecticide gases, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone C</i>	2.3 (2.1)	UN3355		POISON GAS, FLAMMABLE GAS	3	None	302305	Not Accepted by FedEx Ground
G	Insecticide gases, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone D</i>	2.3 (2.1)	UN3355		POISON GAS, FLAMMABLE GAS	4	None	302305	Not Accepted by FedEx Ground
G	Insecticide gases, toxic, n.o.s.	2.3	UN1967		POISON GAS	3	None	193, 334	Not Accepted by FedEx Ground
	<i>Inulin trinitrate (dry)</i>	Forbid- den							
	<i>Iodine azide (dry)</i>	Forbid- den							
	Iodine monochloride	8	UN1792	II	CORROSIVE	N41	None	212	
	Iodine pentafluoride	5.1 (6.1, 8)	UN2495	I	OXIDIZER, POISON, CORROSIVE**		None	205	Accepted only when packaged under applicable special permit or 49CFR 173.13
	2-Iodobutane	3	UN2390	II	FLAMMABLE LIQUID		150	202	
	Iodomethylpropanes	3	UN2391	II	FLAMMABLE LIQUID		150	202	
	Iodopropanes	3	UN2392	III	FLAMMABLE LIQUID		150	203	
	<i>Iodoxy compounds (dry)</i>	Forbid- den							
	<i>Iridium nitratopentamine iridium nitrate</i>	Forbid- den							
	<i>Iron chloride, see Ferric chloride</i>								
	Iron oxide, spent, or Iron sponge, spent <i>obtained from coal gas purification</i>	4.2	UN1376	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Iron pentacarbonyl	6.1 (3)	UN1994	I	POISON, FLAMMABLE LIQUID	1	None	226	Not Accepted by FedEx Ground
	<i>Iron sesquichloride, see Ferric chloride</i>								
	<i>Irritating material, see Tear gas substances, etc.</i>								
	Isobutane <i>see also Petroleum gases, liquefied</i>	2.1	UN1969		FLAMMABLE GAS	19	306	304	
	Isobutanol or Isobutyl alcohol	3	UN1212	III	FLAMMABLE LIQUID		150	203	
	Isobutyl acetate	3	UN1213	II	FLAMMABLE LIQUID		150	202	
	Isobutyl acrylate, stabilized	3	UN2527	III	FLAMMABLE LIQUID		150	203	
	Isobutyl alcohol, <i>see Isobutanol</i>								
	Isobutyl aldehyde, <i>see Isobutyraldehyde</i>								
	Isobutylamine	3 (8)	UN1214	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
D	Isobutyl chloroformate	6.1 (3, 8)	NA2742	I	POISON, FLAMMABLE LIQUID, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
	Isobutylene <i>see also Petroleum gases, liquefied</i>	2.1	UN1055		FLAMMABLE GAS	19	306	304	
	Isobutyl formate	3	UN2393	II	FLAMMABLE LIQUID		150	202	
	Isobutyl isobutyrate	3	UN2528	III	FLAMMABLE LIQUID		150	203	
+	Isobutyl isocyanate	3 (6.1)	UN2486	I	FLAMMABLE LIQUID, POISON	1	None	226	Not Accepted by FedEx Ground
	Isobutyl methacrylate, stabilized	3	UN2283	III	FLAMMABLE LIQUID		150	203	
	Isobutyl propionate	3	UN2394	III	FLAMMABLE LIQUID		150	203	
	Isobutyraldehyde or Isobutyl aldehyde	3	UN2045	II	FLAMMABLE LIQUID		150	202	
	Isobutyric acid	3 (8)	UN2529	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	Isobutyronitrile	3 (6.1)	UN2284	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Isobutyryl chloride	3 (8)	UN2395	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
G	Isocyanates, flammable, toxic, n.o.s. or Isocyanate solutions, flammable, toxic, n.o.s. <i>flashpoint less than 23 degrees C</i>	3 (6.1)	UN2478	II	FLAMMABLE LIQUID, POISON**	5	150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Isocyanates, flammable, toxic, n.o.s. or Isocyanate solutions, flammable, toxic, n.o.s. <i>flashpoint less than 23 degrees C</i>	3 (6.1)	UN2478	III	FLAMMABLE LIQUID, POISON**	5	150	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Isocyanates, toxic, flammable, n.o.s. or Isocyanate solutions, toxic, flammable, n.o.s., <i>flashpoint not less than 23 degrees C but not more than 61 degrees C and boiling point less than 300 degrees C</i>	6.1 (3)	UN3080	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Isocyanates, toxic, n.o.s. or Isocyanate, solutions, toxic, n.o.s., flashpoint more than 61 degrees C and boiling point less than 300 degrees C	6.1	UN2206	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Isocyanates, toxic, n.o.s. or Isocyanate, solutions, toxic, n.o.s., flashpoint more than 61 degrees C and boiling point less than 300 degrees C	6.1	UN2206	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Isocyanatobenzotrifluorides	6.1 (3)	UN2285	II	POISON, FLAMMABLE LIQUID**	5	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Isoheptenes	3	UN2287	II	FLAMMABLE LIQUID		150	202	
	Isohexenes	3	UN2288	II	FLAMMABLE LIQUID		150	202	
	<i>Isooctane, see Octanes</i>								
	Isooctenes	3	UN1216	II	FLAMMABLE LIQUID		150	202	
	<i>Isopentane, see Pentane</i>								
	<i>Isopentanoic acid, see Corrosive liquids, n.o.s.</i>								
	Isopentenes	3	UN2371	I	FLAMMABLE LIQUID		150	201	
	Isophoronediamine	8	UN2289	III	CORROSIVE		154	203	
	Isophorone diisocyanate	6.1	UN2290	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Isoprene, stabilized	3	UN1218	I	FLAMMABLE LIQUID		150	201	
	Isopropanol or Isopropyl alcohol	3	UN1219	II	FLAMMABLE LIQUID		150	202	
	Isopropenyl acetate	3	UN2403	II	FLAMMABLE LIQUID		150	202	
	Isopropenylbenzene	3	UN2303	III	FLAMMABLE LIQUID		150	203	
	Isopropyl 2-chloropropionate	3	UN2934	III	FLAMMABLE LIQUID		150	203	
	Isopropyl acetate	3	UN1220	II	FLAMMABLE LIQUID		150	202	
	Isopropyl acid phosphate	8	UN1793	III	CORROSIVE		154	213	
	Isopropyl alcohol, <i>see Isopropanol</i>								
	Isopropylamine	3 (8)	UN1221	I	FLAMMABLE LIQUID, CORROSIVE		None	201	
	Isopropylbenzene	3	UN1918	III	FLAMMABLE LIQUID		150	203	
	Isopropyl butyrate	3	UN2405	III	FLAMMABLE LIQUID		150	203	
	Isopropyl chloroacetate	3	UN2947	III	FLAMMABLE LIQUID		150	203	
	Isopropyl chloroformate	6.1 (3, 8)	UN2407	I	POISON, FLAMMABLE LIQUID, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
	<i>Isopropylcumyl hydroperoxide, with more than 72 percent in solution</i>	Forbid- den							
	Isopropyl isobutyrate	3	UN2406	II	FLAMMABLE LIQUID		150	202	
+	Isopropyl isocyanate	3 (6.1)	UN2483	I	FLAMMABLE LIQUID, POISON	1	None	226	Not Accepted by FedEx Ground
	<i>Isopropyl mercaptan, see Propanethiols</i>								
	Isopropyl nitrate	3	UN1222	II	FLAMMABLE LIQUID		150	202	
	<i>Isopropyl phosphoric acid, see Isopropyl acid phosphate</i>								
	Isopropyl propionate	3	UN2409	II	FLAMMABLE LIQUID		150	202	
	Isosorbide-5-mononitrate	4.1	UN3251	III	FLAMMABLE SOLID	66	151	213	
	Isosorbide dinitrate mixture with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate	4.1	UN2907	II	FLAMMABLE SOLID	N85	None	212	
	<i>Isothiocyanic acid</i>	Forbid- den							
	<i>Jet fuel, see Fuel aviation, turbine engine</i>								
D	Jet perforating guns, charged oil well, with detonator	1.1D	NA0124	II	EXPLOSIVE 1.1D	55,56	None	62	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
D	<b>Jet perforating guns, charged oil well, with detonator</b>	1.4D	NA0494	II	EXPLOSIVE 1.4D	55,56	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Jet perforating guns, charged oil well, without detonator</i>	1.1D	UN0124	II	EXPLOSIVE 1.1D	55	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Jet perforating guns, charged oil well, without detonator</b>	1.4D	UN0494	II	EXPLOSIVE 1.4D	55,114	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Jet perforators, see Charges, shaped, etc.</i>								
	<i>Jet tappers, without detonator, see Charges, shaped, etc.</i>								
	<i>Jet thrust igniters, for rocket motors or Jato, see Igniters</i>								
	<i>Jet thrust unit (Jato), see Rocket motors</i>								
	<b>Kerosene</b>	3	UN1223	III	FLAMMABLE LIQUID	144	150	203	
G	<b>Ketones, liquid, n.o.s.</b>	3	UN1224	I	FLAMMABLE LIQUID		None	201	
G	<b>Ketones, liquid, n.o.s.</b>	3	UN1224	II	FLAMMABLE LIQUID		150	202	
G	<b>Ketones, liquid, n.o.s.</b>	3	UN1224	III	FLAMMABLE LIQUID		150	203	
	<b>Krypton, compressed</b>	2.2	UN1056		NONFLAMMABLE GAS		306	302	
	<b>Krypton, refrigerated liquid (cryogenic liquid)</b>	2.2	UN1970		NONFLAMMABLE GAS		320	None	Accepted only when packaged under 49CFR 173.320
	<i>Lacquer base or lacquer chips, nitrocellulose, dry, see Nitrocellulose, etc. (UN 2557)</i>								
	<i>Lacquer base or lacquer chips, plastic, wet with alcohol or solvent, see Nitrocellulose (UN 2059, UN 2555, UN 2556, UN2557) or Paint etc. (UN 1263)</i>								
	<b>Lead acetate</b>	6.1	UN1616	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	<b>Lead arsenates</b>	6.1	UN1617	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Lead arsenites</b>	6.1	UN1618	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Lead azide (dry)</i>	Forbid- den							
	<b>Lead azide, wetted with not less than 20 percent water or mixture of alcohol and water, by mass</b>	1.1A	UN0129	II	EXPLOSIVE 1.1A	111, 117	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Lead compounds, soluble, n.o.s.</b>	6.1	UN2291	III	POISON**	138	153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Lead cyanide</b>	6.1	UN1620	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Lead dioxide</b>	5.1	UN1872	III	OXIDIZER		152	213	
	<i>Lead dross, see Lead sulfate, with more than 3 percent free acid</i>								
	<b>Lead nitrate</b>	5.1 (6.1)	UN1469	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	<i>Lead nitroresorcinatate (dry)</i>	Forbid- den							
	<b>Lead perchlorate, solid</b>	5.1 (6.1)	UN1470	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Lead perchlorate, solution</b>	5.1 (6.1)	UN1470	II	OXIDIZER, POISON**		152	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Lead peroxide, see Lead dioxide</i>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym- bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Lead phosphite, dibasic</b>	4.1	UN2989	II	FLAMMABLE SOLID		None	212	
	<b>Lead phosphite, dibasic</b>	4.1	UN2989	III	FLAMMABLE SOLID		151	213	
	<i>Lead picrate (dry)</i>	Forbid- den							
	<i>Lead styphnate (dry)</i>	Forbid- den							
	<b>Lead styphnate, wetted or Lead trinitroresorcinate, wetted with not less than 20 percent water or mixture of alcohol and water, by mass</b>	1.1A	UN0130	II	EXPLOSIVE 1.1A	111, 117	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Lead sulfate with more than 3 percent free acid</b>	8	UN1794	II	CORROSIVE**		154	212	<b>Not to exceed 10 lb. (4.54kg) per package- see RQ Table</b>
	<b>Lead trinitroresorcinate, see Lead styphnate, etc.</b>								
	<b>Life-saving appliances, not self inflating containing dangerous goods as equipment</b>	9	UN3072		NONE		None	219	<b>No packing group required</b>
	<b>Life-saving appliances, self inflating</b>	9	UN2990		NONE		None	219	<b>No packing group required</b>
	<i>Lighter replacement cartridges containing liquefied petroleum gases (and similar devices, each not exceeding 65 grams), see Lighters or lighter refills etc. containing flammable gas</i>								
	<b>Lighters, fuse</b>	1.4S	UN0131	II	EXPLOSIVE 1.4S		None	62	<b>Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)</b>
	<b>Lighters or Lighter refills containing flammable gas</b>	2.1	UN1057		FLAMMABLE GAS	N10	None	21,308	<b>"T" number required for shipment. Please see Special Provision N10</b>
	<i>Lime, unslaked, see Calcium oxide</i>								
G	<b>Liquefied gas, flammable, n.o.s.</b>	2.1	UN3161		FLAMMABLE GAS		306	304	
G	<b>Liquefied gas, n.o.s.</b>	2.2	UN3163		NONFLAMMABLE GAS		306	304	
G	<b>Liquefied gas, oxidizing, n.o.s.</b>	2.2 (5.1)	UN3157		NONFLAMMABLE GAS, OXIDIZER		306	304	
G,I	<b>Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone A</b>	2.3 (8)	UN3308		POISON GAS, CORROSIVE	1	None	192	<b>Not Accepted by FedEx Ground</b>
G,I	<b>Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone B</b>	2.3 (8)	UN3308		POISON GAS, CORROSIVE	2	None	304	<b>Not Accepted by FedEx Ground</b>
G,I	<b>Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone C</b>	2.3 (8)	UN3308		POISON GAS, CORROSIVE	3	None	304	<b>Not Accepted by FedEx Ground</b>
G,I	<b>Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone D</b>	2.3 (8)	UN3308		POISON GAS, CORROSIVE	4	None	304	<b>Not Accepted by FedEx Ground</b>
G,I	<b>Liquefied gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone A</b>	2.3 (2.1, 8)	UN3309		POISON GAS, FLAMMABLE GAS, CORROSIVE	1	None	192	<b>Not Accepted by FedEx Ground</b>
G,I	<b>Liquefied gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone B</b>	2.3 (2.1, 8)	UN3309		POISON GAS, FLAMMABLE GAS, CORROSIVE	2	None	304	<b>Not Accepted by FedEx Ground</b>
G,I	<b>Liquefied gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone C</b>	2.3 (2.1, 8)	UN3309		POISON GAS, FLAMMABLE GAS, CORROSIVE	3	None	304	<b>Not Accepted by FedEx Ground</b>
G,I	<b>Liquefied gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone D</b>	2.3 (2.1, 8)	UN3309		POISON GAS, FLAMMABLE GAS, CORROSIVE	4	None	304	<b>Not Accepted by FedEx Ground</b>
G	<b>Liquefied gas, toxic, flammable, n.o.s. Inhalation Hazard Zone A</b>	2.3 (2.1)	UN3160		POISON GAS, FLAMMABLE GAS	1	None	192	<b>Not Accepted by FedEx Ground</b>
G	<b>Liquefied gas, toxic, flammable, n.o.s. Inhalation Hazard Zone B</b>	2.3 (2.1)	UN3160		POISON GAS, FLAMMABLE GAS	2	None	304	<b>Not Accepted by FedEx Ground</b>
G	<b>Liquefied gas, toxic, flammable, n.o.s. Inhalation Hazard Zone C</b>	2.3 (2.1)	UN3160		POISON GAS, FLAMMABLE GAS	3	None	304	<b>Not Accepted by FedEx Ground</b>
G	<b>Liquefied gas, toxic, flammable, n.o.s. Inhalation Hazard Zone D</b>	2.3 (2.1)	UN3160		POISON GAS, FLAMMABLE GAS	4	None	304	<b>Not Accepted by FedEx Ground</b>
G	<b>Liquefied gas, toxic, n.o.s. Inhalation Hazard Zone A</b>	2.3	UN3162		POISON GAS	1	None	192	<b>Not Accepted by FedEx Ground</b>
G	<b>Liquefied gas, toxic, n.o.s. Inhalation Hazard Zone B</b>	2.3	UN3162		POISON GAS	2	None	304	<b>Not Accepted by FedEx Ground</b>
G	<b>Liquefied gas, toxic, n.o.s. Inhalation Hazard Zone C</b>	2.3	UN3162		POISON GAS	3	None	304	<b>Not Accepted by FedEx Ground</b>
G	<b>Liquefied gas, toxic, n.o.s. Inhalation Hazard Zone D</b>	2.3	UN3162		POISON GAS	4	None	304	<b>Not Accepted by FedEx Ground</b>
G,I A	<b>Liquefied gas, toxic, oxidizing, corrosive, n.o.s. Inhalation Hazard Zone A</b>	2.3 (5.1, 8)	UN3310		POISON GAS, OXIDIZER, CORROSIVE	1	None	192	<b>Not Accepted by FedEx Ground</b>

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\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G,I	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone B</i>	2.3 (5.1, 8)	UN3310		POISON GAS, OXIDIZER, CORROSIVE	2	None	304	Not Accepted by FedEx Ground
G,I	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone C</i>	2.3 (5.1, 8)	UN3310		POISON GAS, OXIDIZER, CORROSIVE	3	None	304	Not Accepted by FedEx Ground
G,I	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone D</i>	2.3 (5.1, 8)	UN3310		POISON GAS, OXIDIZER, CORROSIVE	4	None	304	Not Accepted by FedEx Ground
G	Liquefied gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A</i>	2.3 (5.1)	UN3307		POISON GAS, OXIDIZER	1	None	192	Not Accepted by FedEx Ground
G	Liquefied gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone B</i>	2.3 (5.1)	UN3307		POISON GAS, OXIDIZER	2	None	304	Not Accepted by FedEx Ground
G	Liquefied gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone C</i>	2.3 (5.1)	UN3307		POISON GAS, OXIDIZER	3	None	304	Not Accepted by FedEx Ground
G	Liquefied gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone D</i>	2.3 (5.1)	UN3307		POISON GAS, OXIDIZER	4	None	304	Not Accepted by FedEx Ground
	<i>Liquefied hydrocarbon gas, see Hydrocarbon gas mixture, liquefied, n.o.s.</i>								
	<i>Liquefied natural gas, see Methane, etc. (UN 1972)</i>								
	<i>Liquefied petroleum gas see Petroleum gases, liquefied</i>								
	<b>Lithium</b>	4.3	UN1415	I	DANGEROUS WHEN WET**	N45	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Lithium acetylde ethylenediamine complex, see Water reactive solid etc.</i>								
	<b>Lithium alkyls, liquid</b>	4.2 (4.3)	UN2445	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET	173	None	181	Not Accepted by FedEx Ground
	<b>Lithium alkyls, solid</b>	4.2 (4.3)	UN2445	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET	173	None	181	Not Accepted by FedEx Ground
	<b>Lithium aluminum hydride</b>	4.3	UN1410	I	DANGEROUS WHEN WET**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Lithium aluminum hydride, ethereal</b>	4.3	UN1411	I	DANGEROUS WHEN WET, FLAMMABLE LIQUID**	N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Lithium batteries, contained in equipment</b>	9	UN3091	II	CLASS 9	29	185	185	
	<b>Lithium batteries, packed with equipment</b>	9	UN3091	II	CLASS 9	29	185	185	
	<b>Lithium battery</b>	9	UN3090	II	CLASS 9	29	185	185	
	<b>Lithium borohydride</b>	4.3	UN1413	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Lithium ferrosilicon</b>	4.3	UN2830	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<b>Lithium hydride</b>	4.3	UN1414	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Lithium hydride, fused solid</b>	4.3	UN2805	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<b>Lithium hydroxide</b>	8	UN2680	II	CORROSIVE		154	212	
	<b>Lithium hydroxide, solution</b>	8	UN2679	II	CORROSIVE		154	202	
	<b>Lithium hydroxide, solution</b>	8	UN2679	III	CORROSIVE		154	203	
	<b>Lithium hypochlorite, dry with more than 39% available chlorine (8.8% available oxygen) or Lithium hypochlorite mixtures, dry with more than 39% available chlorine (8.8% available oxygen)</b>	5.1	UN1471	II	OXIDIZER	N34	152	212	
	<i>Lithium in cartridges, see Lithium</i>								
	<b>Lithium nitrate</b>	5.1	UN2722	III	OXIDIZER		152	213	
	<b>Lithium nitride</b>	4.3	UN2806	I	DANGEROUS WHEN WET**	N40	None	211	
	<b>Lithium peroxide</b>	5.1	UN1472	II	OXIDIZER	N34	152	212	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

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## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Lithium silicon	4.3	UN1417	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<i>LNG, see Methane etc. (UN 1972)</i>								
	London purple	6.1	UN1621	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>LPG, see Petroleum gases, liquefied</i>								
	<i>Lye, see Sodium hydroxide, solutions</i>								
	Magnesium alkyls	4.2 (4.3)	UN3053	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET		None	181	Not Accepted by FedEx Ground
	Magnesium aluminum phosphide	4.3 (6.1)	UN1419	I	DANGEROUS WHEN WET, POISON**	N34, N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Magnesium arsenate	6.1	UN1622	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Magnesium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i>								
	Magnesium bromate	5.1	UN1473	II	OXIDIZER		152	212	
	Magnesium chlorate	5.1	UN2723	II	OXIDIZER		152	212	
	Magnesium diamide	4.2	UN2004	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	Magnesium diphenyl	4.2	UN2005	I	SPONTANEOUSLY COMBUSTIBLE	173	None	187	Not Accepted by FedEx Ground
	<i>Magnesium dross, wet or hot</i>	Forbid- den							
	Magnesium fluorosilicate	6.1	UN2853	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Magnesium granules, coated <i>particle size not less than 149 microns</i>	4.3	UN2950	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	Magnesium hydride	4.3	UN2010	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Magnesium nitrate	5.1	UN1474	III	OXIDIZER		152	213	
	Magnesium or Magnesium alloys with more than 50 perscent magnesium in pellets, turning or ribbon	4.1	UN1869	III	FLAMMABLE SOLID		151	213	
	Magnesium perchlorate	5.1	UN1475	II	OXIDIZER		152	212	
	Magnesium peroxide	5.1	UN1476	II	OXIDIZER		152	212	
	Magnesium phosphide	4.3 (6.1)	UN2011	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Magnesium, powder or Magnesium alloys, powder	4.3 (4.2)	UN1418	I	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	211	Not Accepted by FedEx Ground
	Magnesium, powder or Magnesium alloys, powder	4.3 (4.2)	UN1418	II	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	Magnesium, powder or Magnesium alloys, powder	4.3 (4.2)	UN1418	III	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	<i>Magnesium scrap, see Magnesium, etc. (UN 1869)</i>								
	Magnesium silicide	4.3	UN2624	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	<i>Magnetized material, see section 173.21</i>								
	Maleic anhydride	8	UN2215	III	CORROSIVE		154	213	
	Malononitrile	6.1	UN2647	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Mancozeb (manganese ethylenebisdithiocarbamate complex with zinc) see Maneb</i>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym- bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Maneb or Maneb preparations with not less than 60 percent maneb	4.2 (4.3)	UN2210	III	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET	57	None	213	
	Maneb stabilized or Maneb preparations, stabilized against self-heating	4.3	UN2968	III	DANGEROUS WHEN WET**	54	151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	Manganese nitrate	5.1	UN2724	III	OXIDIZER		152	213	
	Manganese resinates	4.1	UN1330	III	FLAMMABLE SOLID		151	213	
	Mannitan tetranitrate	Forbid- den							
	Mannitol hexanitrate (dry)	Forbid- den							
	Mannitol hexanitrate, wetted or Nitromannite, wetted with not less than 40 percent water, or mixture of alcohol and water, by mass	1.1D	UN0133	II	EXPLOSIVE 1.1D	121	None	62	Not Accepted by FedEx Ground
	Marine pollutants, liquid or solid, n.o.s., see Environmentally hazardous substances, liquid or solid, n.o.s.								
	Matches, block, see Matches, 'strike anywhere'								
	Matches, fusee	4.1	UN2254	III	FLAMMABLE SOLID		186	186	
	Matches, safety (book, card or strike on box)	4.1	UN1944	III	FLAMMABLE SOLID		186	186	May not be regulated via highway
	Matches, strike anywhere	4.1	UN1331	III	FLAMMABLE SOLID		186	186	
	Matches, wax, Vesta	4.1	UN1945	III	FLAMMABLE SOLID		186	186	May not be regulated via highway
	Matting acid, see Sulfuric acid								
	Medicine, liquid, flammable, toxic, n.o.s.	3 (6.1)	UN3248	II	FLAMMABLE LIQUID, POISON**	36	150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Medicine, liquid, flammable, toxic, n.o.s.	3 (6.1)	UN3248	III	FLAMMABLE LIQUID, POISON**	36	150	203	Accepted only when packaged under applicable special permit, 49CFR 173.13
	Medicine, liquid, toxic, n.o.s.	6.1	UN1851	II	POISON**	36	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Medicine, liquid, toxic, n.o.s.	6.1	UN1851	III	POISON**	36	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Medicine, solid, toxic, n.o.s.	6.1	UN3249	II	POISON**	36	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Medicine, solid, toxic, n.o.s.	6.1	UN3249	III	POISON**	36	153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mentetrahydrophthalic anhydride, see Corrosive liquids, n.o.s.								
	Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixtures, liquid, flammable, n.o.s.	3	UN3336	I	FLAMMABLE LIQUID		150	201	
	Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixtures, liquid, flammable, n.o.s.	3	UN3336	II	FLAMMABLE LIQUID		150	202	
	Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixtures, liquid, flammable, n.o.s.	3	UN3336	III	FLAMMABLE LIQUID		150	203	
	Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3 (6.1)	UN1228	II	FLAMMABLE LIQUID, POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3 (6.1)	UN1228	III	FLAMMABLE LIQUID, POISON**		150	203	Accepted only when packaged under applicable special permit, 49CFR 173.13
	Mercaptans, liquid, toxic, flammable, n.o.s. or Mercaptan mixtures, liquid, toxic, flammable, n.o.s., flashpoint not less than 23 degrees C	6.1 (3)	UN3071	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	5-Mercaptotetrazol-1-acetic acid	1.4C	UN0448	II	EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Mercuric arsenate	6.1	UN1623	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercuric chloride	6.1	UN1624	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Mercuric compounds, see Mercury compounds, etc.</i>								
	Mercuric nitrate	6.1	UN1625	II	POISON**	N73	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
+	Mercuric potassium cyanide	6.1	UN1626	I	POISON**	N74, N75	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Mercuric sulfocyanate, see Mercury thiocyanate</i>								
	<i>Mercuriol, see Mercury nucleate</i>								
	Mercurous azide	Forbid- den							
	<i>Mercurous compounds, see Mercury compounds, etc.</i>								
	Mercurous nitrate	6.1	UN1627	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
AW	Mercury	8	UN2809	III	CORROSIVE		164	164	May not be regulated via highway. Not accepted if package exceeds 1 lb. (0.454kg) of Mercury- see RQ Table
	Mercury acetate	6.1	UN1629	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Mercury acetylde</i>	Forbid- den							
	Mercury ammonium chloride	6.1	UN1630	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, liquid, flammable, toxic, flash point less than 23 degrees C	3 (6.1)	UN2778	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, liquid, flammable, toxic, flash point less than 23 degrees C	3 (6.1)	UN2778	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, liquid, toxic	6.1	UN3012	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, liquid, toxic	6.1	UN3012	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, liquid, toxic	6.1	UN3012	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN3011	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN3011	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN3011	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, solid, toxic	6.1	UN2777	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, solid, toxic	6.1	UN2777	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury based pesticides, solid, toxic	6.1	UN2777	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury benzoate	6.1	UN1631	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury bromides	6.1	UN1634	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury compounds, liquid, n.o.s.	6.1	UN2024	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury compounds, liquid, n.o.s.	6.1	UN2024	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Mercury compounds, liquid, n.o.s.	6.1	UN2024	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury compounds, solid, n.o.s.	6.1	UN2025	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury compounds, solid, n.o.s.	6.1	UN2025	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury compounds, solid, n.o.s.	6.1	UN2025	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
A	Mercury contained in manufactured articles	8	UN2809	III	CORROSIVE		None	164	May not be regulated via highway. Not accepted if package exceeds 1 lb. (0.454kg) of Mercury- see RQ Table
	Mercury cyanide	6.1	UN1636	II	POISON**	N74,N75	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury fulminate, wetted with not less than 20 percent water, or mixture of alcohol and water, by mass	1.1A	UN0135	II	EXPLOSIVE 1.1A	111, 117	None	62	Not Accepted by FedEx Ground
	Mercury gluconate	6.1	UN1637	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury iodide	6.1	UN1638	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury iodide aquabasic ammonobasic (Iodide of Millon's base)	Forbid- den							
	Mercury nitride	Forbid- den							
	Mercury nucleate	6.1	UN1639	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury oleate	6.1	UN1640	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury oxide	6.1	UN1641	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury oxycyanide	Forbid- den							
	Mercury oxycyanide, desensitized	6.1	UN1642	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury potassium iodide	6.1	UN1643	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury salicylate	6.1	UN1644	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Mercury sulfates	6.1	UN1645	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Mercury thiocyanate	6.1	UN1646	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Mesityl oxide	3	UN1229	III	FLAMMABLE LIQUID		150	203	
G	Metal carbonyls, liquid, n.o.s.	6.1	UN3281	I	POISON**	5	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Metal carbonyls, liquid, n.o.s.	6.1	UN3281	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Metal carbonyls, liquid, n.o.s.	6.1	UN3281	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Metal carbonyls, solid, n.o.s.	6.1	UN3466	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Metal carbonyls, solid, n.o.s.	6.1	UN3466	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Metal carbonyls, solid, n.o.s.	6.1	UN3466	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Metal catalyst, dry	4.2	UN2881	I	SPONTANEOUSLY COMBUSTIBLE	N34	None	187	Not Accepted by FedEx Ground
	Metal catalyst, dry	4.2	UN2881	II	SPONTANEOUSLY COMBUSTIBLE	N34	None	187	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Metal catalyst, dry	4.2	UN2881	III	SPONTANEOUSLY COMBUSTIBLE	N34	None	187	Not Accepted by FedEx Ground
	Metal catalyst, wetted <i>with a visible excess of liquid</i>	4.2	UN1378	II	SPONTANEOUSLY COMBUSTIBLE	N34	None	212	Not Accepted by FedEx Ground
	Metaldehyde	4.1	UN1332	III	FLAMMABLE SOLID		151	213	
	Metal hydrides, flammable, n.o.s.	4.1	UN3182	II	FLAMMABLE SOLID		151	212	
	Metal hydrides, flammable, n.o.s.	4.1	UN3182	III	FLAMMABLE SOLID		151	213	
	Metal hydrides, water reactive, n.o.s.	4.3	UN1409	I	DANGEROUS WHEN WET**	N34, N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Metal hydrides, water reactive, n.o.s.	4.3	UN1409	II	DANGEROUS WHEN WET**	N34, N40	151	211	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Metallic substance, water-reactive, n.o.s.	4.3	UN3208	I	DANGEROUS WHEN WET**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Metallic substance, water-reactive, n.o.s.	4.3	UN3208	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Metallic substance, water-reactive, n.o.s.	4.3	UN3208	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Metallic substance, water-reactive, self-heating, n.o.s.	4.3 (4.2)	UN3209	I	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	211	Not Accepted by FedEx Ground
G	Metallic substance, water-reactive, self-heating, n.o.s.	4.3 (4.2)	UN3209	II	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
G	Metallic substance, water-reactive, self-heating, n.o.s.	4.3 (4.2)	UN3209	III	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Metal powder, self-heating, n.o.s.	4.2	UN3189	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	Metal powder, self-heating, n.o.s.	4.2	UN3189	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Metal powders, flammable, n.o.s.	4.1	UN3089	II	FLAMMABLE SOLID		151	212	
	Metal powders, flammable, n.o.s.	4.1	UN3089	III	FLAMMABLE SOLID		151	213	
	<i>Metal salts of methyl nitramine (dry)</i>	Forbid- den							
G	Metal salts of organic compounds, flammable, n.o.s.	4.1	UN3181	II	FLAMMABLE SOLID		151	212	
G	Metal salts of organic compounds, flammable, n.o.s.	4.1	UN3181	III	FLAMMABLE SOLID		151	213	
	Methacrylaldehyde, stabilized	3 (6.1)	UN2396	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Methacrylic acid, stabilized	8	UN2531	II	CORROSIVE		154	202	
+	Methacrylonitrile, stabilized	3 (6.1)	UN3079	I	FLAMMABLE LIQUID, POISON	2	None	227	Not Accepted by FedEx Ground
	Methallyl alcohol	3	UN2614	III	FLAMMABLE LIQUID		150	203	
	<i>Methane and hydrogen, mixtures, see Hydrogen and methane, mixtures, etc.</i>								
	Methane, compressed or Natural gas, compressed (with high methane content)	2.1	UN1971		FLAMMABLE GAS		306	302	
	Methane, refrigerated liquid (cryogenic liquid) or Natural gas, refrigerated liquid (cryogenic liquid), with high methane content	2.1	UN1972		FLAMMABLE GAS		None	None	Not Accepted by FedEx Ground
	Methanesulfonyl chloride	6.1 (8)	UN3246	I	POISON, CORROSIVE	2,25	None	227	Not Accepted by FedEx Ground
D	Methanol	3	UN1230	II	FLAMMABLE LIQUID		150	202	
+I	Methanol	3 (6.1)	UN1230	II	FLAMMABLE LIQUID, POISON		150	202	Applicable only for international transportation. (see entry below for FedEx Ground requirements)
	<i>Methazoic acid</i>	Forbid- den							
	2-Methylbutanal	3	UN3371	II	FLAMMABLE LIQUID		150	202	
	1-Methoxy-2-propanol	3	UN3092	III	FLAMMABLE LIQUID		150	203	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	4-Methoxy-4-methylpentan-2-one	3	UN2293	III	FLAMMABLE LIQUID		150	203	
+	Methoxymethyl isocyanate	3 (6.1)	UN2605	I	FLAMMABLE LIQUID, POISON	1	None	226	Not Accepted by FedEx Ground
	2-Methyl-1-butene	3	UN2459	I	FLAMMABLE LIQUID		None	201	
	3-Methyl-1-butene	3	UN2561	I	FLAMMABLE LIQUID		None	201	
	2-Methyl-2-butene	3	UN2460	II	FLAMMABLE LIQUID		None	202	
	Methyl 2-chloropropionate	3	UN2933	III	FLAMMABLE LIQUID		150	203	
	2-Methyl-2-heptanethiol	6.1 (3)	UN3023	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	2-Methyl-5-ethylpyridine	6.1	UN2300	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Methyl acetate	3	UN1231	II	FLAMMABLE LIQUID		150	202	
	Methyl acetylene and propadiene mixtures, stabilized	2.1	UN1060		FLAMMABLE GAS		306	304	
	Methyl acrylate, stabilized	3	UN1919	II	FLAMMABLE LIQUID		150	202	
	Methylal	3	UN1234	II	FLAMMABLE LIQUID		None	202	
	<i>Methyl alcohol, see Methanol</i>								
	Methyl allyl chloride	3	UN2554	II	FLAMMABLE LIQUID		150	202	
	Methylamine, anhydrous	2.1	UN1061		FLAMMABLE GAS		306	304	
	Methylamine, aqueous solution	3 (8)	UN1235	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<i>Methylamine dinitramine and dry salts thereof</i>	Forbid- den							
	<i>Methylamine nitroform</i>	Forbid- den							
	<i>Methylamine perchlorate (dry)</i>	Forbid- den							
	Methylamyl acetate	3	UN1233	III	FLAMMABLE LIQUID		150	203	
	<i>Methyl amyl ketone, see Amyl methyl ketone</i>								
	N-Methylaniline	6.1	UN2294	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	alpha-Methylbenzyl alcohol, liquid	6.1	UN2937	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	alpha-Methylbenzyl alcohol, solid	6.1	UN3438	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Methyl bromide	2.3	UN1062		POISON GAS	3	None	193	Not Accepted by FedEx Ground
	<i>Methyl bromide and chloropicrin mixtures with more than 2 percent chloropicrin, see Chloropicrin and methyl bromide mixtures</i>								
	<i>Methyl bromide and chloropicrin mixtures with not more than 2 percent chloropicrin, see Methyl bromide</i>								
	Methyl bromide and ethylene dibromide mixtures, liquid	6.1	UN1647	I	POISON	2,N65	None	227	Not Accepted by FedEx Ground
	Methyl bromoacetate	6.1	UN2643	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	3-Methylbutan-2-one	3	UN2397	II	FLAMMABLE LIQUID		150	202	
	N-Methylbutylamine	3 (8)	UN2945	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	Methyl butyrate	3	UN1237	II	FLAMMABLE LIQUID		150	202	
	<i>Methyl chloride and chloropicrin mixtures, see Chloropicrin and methyl chloride mixtures</i>								
	Methyl chloride and methylene chloride mixtures	2.1	UN1912		FLAMMABLE GAS		306	304	
	Methyl chloride or Refrigerant gas R 40	2.1	UN1063		FLAMMABLE GAS		306	304	
	Methyl chloroacetate	6.1 (3)	UN2295	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Methyl chlorocarbonate, see Methyl chloroformate</i>								
	Methyl chloroformate	6.1 (3, 8)	UN1238	I	POISON, FLAMMABLE LIQUID, CORROSIVE	1,N34	None	226	Not Accepted by FedEx Ground
	Methyl chloroform, see 1,1,1-Trichloroethane								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Methyl chloromethyl ether</b>	6.1 (3)	UN1239	I	POISON, FLAMMABLE LIQUID	1	None	226	Not Accepted by FedEx Ground
	<b>Methylchlorosilane</b>	2.3 (3, 8)	UN2534		POISON GAS, FLAMMABLE GAS, CORROSIVE	2,N34	None	226	Not Accepted by FedEx Ground
	<b>Methylcyclohexane</b>	3	UN2296	II	FLAMMABLE LIQUID		150	202	
	<b>Methylcyclohexanols, flammable</b>	3	UN2617	III	FLAMMABLE LIQUID		150	203	
	<b>Methylcyclohexanone</b>	3	UN2297	III	FLAMMABLE LIQUID		150	203	
	<b>Methylcyclopentane</b>	3	UN2298	II	FLAMMABLE LIQUID		150	202	
	<b>Methyl dichloroacetate</b>	6.1	UN2299	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	<b>Methyldichloroarsine</b>	6.1	NA1556	I	POISON	2	None	192	Not Accepted by FedEx Ground
	<b>Methyldichlorosilane</b>	4.3 (8, 3)	UN1242	I	DANGEROUS WHEN WET, CORROSIVE, FLAMMABLE LIQUID**	N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Methylene chloride, see Dichloromethane</i>								
	<i>Methylene glycol dinitrate</i>	Forbid- den							
	<i>Methyl ethyl ether, see Ethyl methyl ether</i>								
	<i>Methyl ethyl ketone peroxide, in solution with more than 9 percent by mass active oxygen</i>	Forbid- den							
	<b>Methyl ethyl ketone, see Ethyl methyl ketone</b>								
	<b>Methyl fluoride or Refrigerant gas R 41</b>	2.1	UN2454		FLAMMABLE GAS		306	304	
	<b>Methyl formate</b>	3	UN1243	I	FLAMMABLE LIQUID		150	201	
	<b>2-Methylfuran</b>	3	UN2301	II	FLAMMABLE LIQUID		150	202	
	<i>a-Methylglucoside tetranitrate</i>	Forbid- den							
	<i>a-Methylglycerol trinitrate</i>	Forbid- den							
	<b>5-Methylhexan-2-one</b>	3	UN2302	III	FLAMMABLE LIQUID		150	203	
	<b>Methylhydrazine</b>	6.1 (3, 8)	UN1244	I	POISON, FLAMMABLE LIQUID, CORROSIVE	1,N34	None	226	Not Accepted by FedEx Ground
	<b>Methyl iodide</b>	6.1	UN2644	I	POISON	2	None	227	Not Accepted by FedEx Ground
	<b>Methyl isobutyl carbinol</b>	3	UN2053	III	FLAMMABLE LIQUID		150	203	
	<b>Methyl isobutyl ketone</b>	3	UN1245	II	FLAMMABLE LIQUID		150	202	
	<i>Methyl isobutyl ketone peroxide, in solution with more than 9 percent by mass active oxygen</i>	Forbid- den							
	<b>Methyl isocyanate</b>	6.1 (3)	UN2480	I	POISON, FLAMMABLE LIQUID	1	None	226	Not Accepted by FedEx Ground
	<b>Methyl isopropenyl ketone, stabilized</b>	3	UN1246	II	FLAMMABLE LIQUID		150	202	
	<b>Methyl isothiocyanate</b>	6.1 (3)	UN2477	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	<b>Methyl isovalerate</b>	3	UN2400	II	FLAMMABLE LIQUID		150	202	
	<b>Methyl magnesium bromide, in ethyl ether</b>	4.3 (3)	UN1928	I	DANGEROUS WHEN WET, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Methyl mercaptan</b>	2.3 (2.1)	UN1064		POISON GAS, FLAMMABLE GAS	3	None	304	Not Accepted by FedEx Ground
	<i>Methyl mercaptoproionaldehyde, see 4-Thiapentanal</i>								
	<b>Methyl methacrylate monomer, stabilized</b>	3	UN1247	II	FLAMMABLE LIQUID		150	202	
	<b>4-Methylmorpholine or n-methylmorpholine</b>	3 (8)	UN2535	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<i>Methyl nitramine (dry)</i>	Forbid- den							
	<i>Methyl nitrate</i>	Forbid- den							
	<i>Methyl nitrite</i>	Forbid- den							
	<i>Methyl norbornene dicarboxylic anhydride, see Corrosive liquids, n.o.s.</i>								
	<b>Methyl orthosilicate</b>	6.1 (3)	UN2606	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	<b>Methylpentadienes</b>	3	UN2461	II	FLAMMABLE LIQUID		150	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments								Packaging (§173.***)	FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)	
	<b>2-Methylpentan-2-ol</b>	3	UN2560	III	FLAMMABLE LIQUID		150	203		
	<i>Methylpentanes, see Hexanes</i>									
	<b>Methylphenyldichlorosilane</b>	8	UN2437	II	CORROSIVE		154	202		
D	<b>Methyl phosphonic dichloride</b>	6.1 (8)	NA9206	I	POISON, CORROSIVE	2,N34,N43	None	227	<b>Not Accepted by FedEx Ground</b>	
	<i>Methyl phosphonothioic dichloride, anhydrous, see Corrosive liquid, n.o.s.</i>									
D	<b>Methyl phosphonous dichloride, pyrophoric liquid</b>	6.1 (4.2)	NA2845	I	POISON, SPONTANEOUSLY COMBUSTIBLE	2	None	227	<b>Not Accepted by FedEx Ground</b>	
	<i>Methyl picric acid (heavy metal salts of)</i>	Forbid- den								
	<b>1-Methylpiperidine</b>	3 (8)	UN2399	II	FLAMMABLE LIQUID, CORROSIVE		150	202		
	<b>Methyl propionate</b>	3	UN1248	II	FLAMMABLE LIQUID		150	202		
	<b>Methyl propyl ether</b>	3	UN2612	II	FLAMMABLE LIQUID		150	202		
	<b>Methyl propyl ketone</b>	3	UN1249	II	FLAMMABLE LIQUID		150	202		
	<i>Methyl sulfate, see Dimethyl sulfate</i>									
	<i>Methyl sulfide, see Dimethyl sulfide</i>									
	<b>Methyl tert-butyl ether</b>	3	UN2398	II	FLAMMABLE LIQUID		150	202		
	<b>Methyltetrahydrofuran</b>	3	UN2536	II	FLAMMABLE LIQUID		150	202		
	<b>Methyl trichloroacetate</b>	6.1	UN2533	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13	
	<b>Methyltrichlorosilane</b>	3 (8)	UN1250	I	FLAMMABLE LIQUID, CORROSIVE	N34	None	201		
	<i>Methyl trimethylol methane trinitrate</i>	Forbid- den								
	<b>alpha-Methylvaleraldehyde</b>	3	UN2367	II	FLAMMABLE LIQUID		150	202		
	<b>Methyl vinyl ketone, stabilized</b>	6.1 (3, 8)	UN1251	I	POISON,FLAMMABLE LIQUID, CORROSIVE	1	None	226	<b>Not Accepted by FedEx Ground</b>	
	<i>Mine rescue equipment containing carbon dioxide, see Carbon dioxide</i>									
	<b>Mines with bursting charge</b>	1.1F	UN0136	II	EXPLOSIVE 1.1F		None	62	<b>Not Accepted by FedEx Ground</b>	
	<b>Mines with bursting charge</b>	1.1D	UN0137	II	EXPLOSIVE 1.1D		None	62	<b>Not Accepted by FedEx Ground</b>	
	<b>Mines with bursting charge</b>	1.2D	UN0138	II	EXPLOSIVE 1.2D		None	62	<b>Not Accepted by FedEx Ground</b>	
	<b>Mines with bursting charge</b>	1.2F	UN0294	II	EXPLOSIVE 1.2F		None	62	<b>Not Accepted by FedEx Ground</b>	
	<i>Mixed acid, see Nitrating acid, mixtures etc.</i>									
	<i>Mobility aids, see Battery powered equipment or Battery powered vehicle'</i>									
D	<b>Model rocket motor</b>	1.4S	NA0323	II	EXPLOSIVE 1.4S	51	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 173.320)	
D	<b>Model rocket motor</b>	1.4C	NA0276	II	EXPLOSIVE 1.4C	51	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 173.320)	
	<b>Molybdenum pentachloride</b>	8	UN2508	III	CORROSIVE		154	213		
	<i>Monochloroacetone (unstabilized)</i>	Forbid- den								
	<i>Monochloroethylene, see Vinyl chloride, stabilized</i>									
	<i>Monoethanolamine, see Ethanolamine, solutions</i>									
	<i>Monoethylamine, see Ethylamine</i>									
	<b>Morpholine</b>	8	UN2054	I	CORROSIVE, FLAMMABLE LIQUID		None	201		
	<i>Morpholine, aqueous, mixture, see Corrosive liquids, n.o.s.</i>									
	<b>Motor fuel anti-knock compounds see Motor fuel anti-knock mixtures</b>									

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
+	Motor fuel anti-knock mixtures	6.1 (3)	UN1649	I	POISON, FLAMMABLE LIQUID**	14	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Motor spirit <i>see</i> Gasoline								
	Muriatic acid, <i>see</i> Hydrochloric acid solution								
	Musk xylene, <i>see</i> 5-tert-Butyl-2,4,6-trinitro-m-xylene								
	Naphthalene, crude <i>or</i> Naphthalene, refined	4.1	UN1334	III	FLAMMABLE SOLID		151	213	
	<i>Naphthalene diozonide</i>	Forbid- den							
	Naphthalene, molten	4.1	UN2304	III	FLAMMABLE SOLID		151	213	Not Accepted by FedEx Ground
	<i>Naphtha see</i> Petroleum distillate n.o.s.								
	beta-Naphthylamine	6.1	UN1650	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	alpha-Naphthylamine	6.1	UN2077	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Naphthylamineperchlorate	Forbid- den							
	beta-Naphthylamine, solid	6.1	UN1650	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	beta-Naphthylamine solution	6.1	UN3411	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	beta-Naphthylamine solution	6.1	UN3411	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Naphthylthiourea	6.1	UN1651	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Naphthylurea	6.1	UN1652	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Natural gases (with high methane content), see Methane, etc. (UN 1971, UN 1972)</i>								
	<i>Neohexane, see Hexanes</i>								
	Neon, compressed	2.2	UN1065		NONFLAMMABLE GAS		306	302	
	Neon, refrigerated liquid ( <i>cryogenic liquid</i> )	2.2	UN1913		NONFLAMMABLE GAS**		320	316	Accepted only when packaged under exception 49CFR 173.320
	<i>New explosive or explosive device, see sections 173.51 and 173.56</i>								
	Nickel carbonyl	6.1 (3)	UN1259	I	POISON, FLAMMABLE LIQUID	1	None	198	Not Accepted by FedEx Ground
	Nickel cyanide	6.1	UN1653	II	POISON**	N74,N75	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Nickel nitrate	5.1	UN2725	III	OXIDIZER		152	213	
	Nickel nitrite	5.1	UN2726	III	OXIDIZER		152	213	
	<i>Nickel picrate</i>	Forbid- den							
	Nicotine	6.1	UN1654	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine compounds, liquid, n.o.s. <i>or</i> Nicotine preparations, liquid, n.o.s.	6.1	UN3144	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine compounds, liquid, n.o.s. <i>or</i> Nicotine preparations, liquid, n.o.s.	6.1	UN3144	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine compounds, liquid, n.o.s. <i>or</i> Nicotine preparations, liquid, n.o.s.	6.1	UN3144	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine compounds, solid, n.o.s. <i>or</i> Nicotine preparations, solid, n.o.s.	6.1	UN1655	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine compounds, solid, n.o.s. <i>or</i> Nicotine preparations, solid, n.o.s.	6.1	UN1655	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Nicotine compounds, solid, n.o.s. <i>or</i> Nicotine preparations, solid, n.o.s.	6.1	UN1655	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine hydrochloride liquid <i>or</i> solution	6.1	UN1656	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine hydrochloride liquid <i>or</i> solution	6.1	UN1656	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine hydrochloride, solid	6.1	UN3444	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine salicylate	6.1	UN1657	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine sulfate, <i>solution</i>	6.1	UN1658	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine sulfate, <i>solution</i>	6.1	UN1658	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine sulphate, <i>solid</i>	6.1	UN3445	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nicotine tartrate	6.1	UN1659	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Nitrated paper (unstable)</i>	Forbid- den							
	Nitrates, inorganic, aqueous solution, n.o.s.	5.1	UN3218	II	OXIDIZER	58	152	202	
	Nitrates, inorganic, aqueous solution, n.o.s.	5.1	UN3218	III	OXIDIZER	58	152	203	
	Nitrates, inorganic, n.o.s.	5.1	UN1477	II	OXIDIZER		152	212	
	Nitrates, inorganic, n.o.s.	5.1	UN1477	III	OXIDIZER		152	213	
	<i>Nitrates of diazonium compounds</i>	Forbid- den							
	Nitrating acid mixtures, spent with more than 50 percent acid	8 (5.1)	UN1826	I	CORROSIVE, OXIDIZER		None	158	
	Nitrating acid mixtures, spent with not more than 50 percent acid	8	UN1826	II	CORROSIVE		None	158	
	Nitrating acid mixtures, with more than 50 percent acid	8 (5.1)	UN1796	I	CORROSIVE, OXIDIZER		None	158	
	Nitrating acid mixtures, with not more than 50 percent acid	8	UN1796	II	CORROSIVE		None	158	
	Nitric acid other than red fuming, with more than 70 percent nitric acid	8 (5.1)	UN2031	I	CORROSIVE, OXIDIZER		None	158	
	Nitric acid other than red fuming, with not more than 70 percent nitric acid	8	UN2031	II	CORROSIVE		None	158	
+	Nitric acid, red fuming	8 (5.1, 6.1)	UN2032	I	CORROSIVE, OXIDIZER, POISON	2	None	227	Not Accepted by FedEx Ground
	Nitric oxide and dinitrogen tetroxide mixtures <i>or</i> Nitric oxide and nitrogen dioxide mixtures	2.3 (5.1, 8)	UN1975		POISON GAS, OXIDIZER, CORROSIVE	1	None	337	Not Accepted by FedEx Ground
	Nitric oxide, compressed	2.3 (5.1, 8)	UN1660		POISON GAS, OXIDIZER, CORROSIVE	1	None	337	Not Accepted by FedEx Ground
G	Nitriles, flammable, toxic, n.o.s.	3 (6.1)	UN3273	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Nitriles, flammable, toxic, n.o.s.	3 (6.1)	UN3273	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Nitriles, toxic, flammable, n.o.s.	6.1 (3)	UN3275	I	POISON, FLAMMABLE LIQUID**	5	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Nitriles, toxic, flammable, n.o.s.	6.1 (3)	UN3275	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Nitriles, toxic, liquid, n.o.s.	6.1	UN3276	I	POISON**	5	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Nitriles, toxic, liquid, n.o.s.	6.1	UN3276	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Nitriles, toxic, liquid, n.o.s.	6.1	UN3276	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Nitriles, toxic, solid, n.o.s.	6.1	UN3439	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Nitriles, toxic, solid, n.o.s.	6.1	UN3439	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Nitriles, toxic, solid, n.o.s.	6.1	UN3439	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitrites, inorganic, aqueous solution, n.o.s.	5.1	UN3219	II	OXIDIZER		152	202	
	Nitrites, inorganic, aqueous solution, n.o.s.	5.1	UN3219	III	OXIDIZER		152	203	
	Nitrites, inorganic, n.o.s.	5.1	UN2627	II	OXIDIZER	33	152	212	
	<i>2-Nitro-2-methylpropanol nitrate</i>	Forbid- den							
	3-Nitro-4-chlorobenzotrifluoride	6.1	UN2307	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>6-Nitro-4-diazotoluene-3-sulfonic acid (dry)</i>	Forbid- den							
	<i>N-Nitroaniline</i>	Forbid- den							
+	Nitroanilines (o-;m-;p-;)	6.1	UN1661	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitroanisole, liquid	6.1	UN2730	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitroanisole, solid	6.1	UN3458	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Nitrobenzene	6.1	UN1662	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>m-Nitrobenzene diazonium perchlorate</i>	Forbid- den							
	Nitrobenzenesulfonic acid	8	UN2305	II	CORROSIVE		154	202	
	<i>Nitrobenzol, see Nitrobenzene</i>								
	5-Nitrobenzotriazol	1.1D	UN0385	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Nitrobenzotrifluorides, liquid	6.1	UN2306	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitrobenzotrifluorides, solid	6.1	UN3431	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitrobromobenzenes liquid	6.1	UN2732	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitrobromobenzenes solid	6.1	UN2732	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitrocellulose, dry or wetted with less than 25 percent water (or alcohol), by mass	1.1D	UN0340	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Nitrocellulose membrane filters, with not more than 12.6% nitrogen, by dry mass	4.1	UN3270	II	FLAMMABLE SOLID	43	151	212	
	Nitrocellulose, plasticized with not less than 18 percent plasticizing substance, by mass	1.3C	UN0343	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Nitrocellulose, solution, flammable with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose	3	UN2059	I	FLAMMABLE LIQUID		None	201	
	Nitrocellulose, solution, flammable with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose	3	UN2059	II	FLAMMABLE LIQUID		150	202	
	Nitrocellulose, solution, flammable with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose	3	UN2059	III	FLAMMABLE LIQUID		150	203	
	Nitrocellulose, unmodified or plasticized with less than 18 percent plasticizing substance, by mass	1.1D	UN0341	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Nitrocellulose, wetted with not less than 25 percent alcohol, by mass	1.3C	UN0342	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Nitrocellulose with alcohol with not less than 25 percent alcohol by mass, and with not more than 12.6 percent nitrogen, by dry mass	4.1	UN2556	II	FLAMMABLE SOLID		151	212	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Nitrocellulose, with not more than 12.6 percent nitrogen, by dry mass, or Nitrocellulose mixture with pigment or Nitrocellulose mixture with plasticizer or Nitrocellulose mixture with pigment and plasticizer</b>	4.1	UN2557	II	FLAMMABLE SOLID	44	151	212	
	<b>Nitrocellulose with water with not less than 25 percent water, by mass</b>	4.1	UN2555	II	FLAMMABLE SOLID		151	212	
	<i>Nitrochlorobenzene, see Chloronitrobenzenes etc.</i>								
	<b>Nitrocresols, liquid</b>	6.1	UN3434	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Nitrocresols, solid</b>	6.1	UN2446	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Nitroethane</b>	3	UN2842	III	FLAMMABLE LIQUID		150	203	
	<i>Nitroethylene polymer</i>	Forbid- den							
	<i>Nitroethyl nitrate</i>	Forbid- den							
	<b>Nitrogen, compressed</b>	2.2	UN1066		NONFLAMMABLE GAS		306	302	
	<b>Nitrogen dioxide see Dinitrogen tetroxide</b>								
	<i>Nitrogen fertilizer solution, see Fertilizer ammoniating solution etc.</i>								
	<i>Nitrogen, mixtures with rare gases, see Rare gases and nitrogen mixtures</i>								
	<i>Nitrogen peroxide, see Dinitrogen tetroxide</i>								
	<b>Nitrogen, refrigerated liquid cryogenic liquid</b>	2.2	UN1977		NONFLAMMABLE GAS		320	316	Accepted only when packaged under exception 49CFR 173.320
	<i>Nitrogen tetroxide and nitric oxide mixtures, see Nitric oxide and nitrogen tetroxide mixtures</i>								
	<i>Nitrogen tetroxide, see Dinitrogen tetroxide</i>								
	<i>Nitrogen trichloride</i>	Forbid- den							
	<b>Nitrogen trifluoride</b>	2.2 (5.1)	UN2451		NON-FLAMMBLE GAS, OXIDIZER		None	302	
	<i>Nitrogen triiodide</i>	Forbid- den							
	<i>Nitrogen triiodide monoamine</i>	Forbid- den							
	<b>Nitrogen trioxide</b>	2.3 (5.1, 8)	UN2421		POISON GAS, OXIDIZER, CORROSIVE	1	None	336	Not Accepted by FedEx Ground
	<b>Nitroglycerin, desensitized with not less than 40 percent non-volatile water insoluble phlegmatizer, by mass</b>	1.1D (6.1)	UN0143	II	EXPLOSIVE 1.1D, POISON	125	None	62	Not Accepted by FedEx Ground
	<i>Nitroglycerin, liquid, not desensitized</i>	Forbid- den							
	<b>Nitroglycerin mixture desensitized, liquid, flammable, n.o.s. with not more than 30 percent nitroglycerin, by mass.</b>	3	UN3343		FLAMMABLE LIQUID	129	None	214	Not Accepted by FedEx Ground
	<b>Nitroglycerin mixture desensitized, liquid, n.o.s. with not more than 30% nitroglycerin, by mass.</b>	3	UN3357	II	FLAMMABLE LIQUID	142	None	202	Not Accepted by FedEx Ground
	<b>Nitroglycerin mixture desensitized, solid, n.o.s. with more than 2 percent but not more than 10 percent nitroglycerin, by mass.</b>	4.1	UN3319	II	FLAMMABLE SOLID	118	None	None	Not Accepted by FedEx Ground
	<b>Nitroglycerin, solution in alcohol, with more than 1 percent but not more than 10 percent nitroglycerin</b>	1.1D	UN0144	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Nitroglycerin, solution in alcohol, with more than 1 percent but not more than 5 percent nitroglycerin</b>	3	UN3064	II	FLAMMABLE LIQUID	N8	None	202	
	<b>Nitroglycerin solution in alcohol with not more than 1 percent nitroglycerin</b>	3	UN1204	II	FLAMMABLE LIQUID	N34	150	202	
	<i>Nitroguanidine nitrate</i>	Forbid- den							

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Nitroguanidine or Picrite, dry or wetted with less than 20 percent water, by mass	1.1D	UN0282	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Nitroguanidine, wetted or Picrite, wetted with not less than 20 percent water, by mass	4.1	UN1336	I	FLAMMABLE SOLID	23, N41	None	211	
	<i>1-Nitrohydantoin</i>	Forbid- den							
	Nitrohydrochloric acid	8	UN1798	I	CORROSIVE	N41	None	201	
	Nitro isobutane triol trinitrate								
	<i>Nitromannite (dry)</i>	Forbid- den							
	Nitromannite, wetted, see Mannitol hexanitrate, etc.								
	Nitromethane	3	UN1261	II	FLAMMABLE LIQUID		150	202	
	<i>Nitromuriatic acid, see Nitrohydrochloric acid</i>								
	Nitronaphthalene	4.1	UN2538	III	FLAMMABLE SOLID		151	213	
	<i>N-Nitro-N-methylglycolamide nitrate</i>	Forbid- den							
+	Nitrophenols (o-; m-; p-;)	6.1	UN1663	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>m-Nitrophenyldinitro methane</i>	Forbid- den							
	4-Nitrophenylhydrazine, with not less than 30% water, by mass	4.1	UN3376	I	FLAMMABLE SOLID	164	None	211	
	Nitropropanes	3	UN2608	III	FLAMMABLE LIQUID**		150	203	Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	p-Nitrosodimethylaniline	4.2	UN1369	II	SPONTANEOUSLY COMBUSTIBLE	N34	None	212	Not Accepted by FedEx Ground
	Nitrostarch, dry or wetted with less than 20 percent water, by mass	1.1D	UN0146	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Nitrostarch, wetted with not less than 20 percent water, by mass	4.1	UN1337	I	FLAMMABLE SOLID	23, N41	None	211	
	<i>Nitrosugars (dry)</i>	Forbid- den							
	Nitrosyl chloride	2.3 (8)	UN1069		POISON GAS, CORROSIVE	3	None	304	Not Accepted by FedEx Ground
	Nitrosylsulfuric acid, liquid	8	UN2308	II	CORROSIVE	N34	154	202	
	Nitrosylsulfuric acid, solid	8	UN3456	II	CORROSIVE		154	212	
	Nitrotoluenes, liquid	6.1	UN1664	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitrotoluenes, solid	6.1	UN3446	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitrotoluidines (mono)	6.1	UN2660	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitrotriazolone or NTO	1.1D	UN0490	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Nitro urea	1.1D	UN0147	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Nitrous oxide	2.2 (5.1)	UN1070		NONFLAMMABLE GAS, OXIDIZER		306	304	
	<i>Nitrous oxide and carbon dioxide mixtures, see Carbon dioxide and nitrous oxide mixtures</i>								
	Nitrous oxide, refrigerated liquid	2.2 (5.1)	UN2201		NONFLAMMABLE GAS, OXIDIZER		None	304	
	Nitroxylenes, liquid	6.1	UN1665	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Nitroxylenes, solid	6.1	UN3447	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Nitroxylol, see Nitroxylenes</i>								
	Nonanes	3	UN1920	III	FLAMMABLE LIQUID		150	203	
	<i>Non-flammable gas, n.o.s., see Compressed gas, etc. or Liquefied gases, etc.</i>								
	<i>Nonliquefied gases, see Compressed gases, etc.</i>								
	<i>Nonliquefied hydrocarbon gas, see Hydrocarbon gases, compressed, n.o.s.</i>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Nonyltrichlorosilane</b>	8	UN1799	II	CORROSIVE	N34	None	202	
	2,5-Norbornadiene stabilized, see Bicyclo 2,2,1 hepta-2,5-diene, stabilized								
	<i>Nordhausen acid, see Sulfuric acid, fuming etc.</i>								
	<b>Octadecyltrichlorosilane</b>	8	UN1800	II	CORROSIVE	N34	None	202	
	<b>Octadiene</b>	3	UN2309	II	FLAMMABLE LIQUID		150	202	
	<i>1,7-Octadine-3,5-diyne-1,8-dimethoxy-9-octadecynoic acid</i>	Forbid- den							
	<b>Octafluorobut-2-ene or Refrigerant gas R 1318</b>	2.2	UN2422		NONFLAMMABLE GAS		None	304	
	<b>Octafluorocyclobutane or Refrigerant gas RC 318</b>	2.2	UN1976		NONFLAMMABLE GAS		None	304	
	<b>Octafluoropropane or Refrigerant gas R 218</b>	2.2	UN2424		NONFLAMMABLE GAS		None	304	
	<b>Octanes</b>	3	UN1262	II	FLAMMABLE LIQUID		150	202	
	<i>Octogen, ect. see Cyclotetramethylene tetranitramine, etc.</i>								
	<b>Octolite or Octol, dry or wetted with less than 15 percent water, by mass</b>	1.1D	UN0266	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Octonal</b>	1.1D	UN0496		EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Octyl aldehydes</b>	3	UN1191	III	FLAMMABLE LIQUID		150	203	
	<b>Octyltrichlorosilane</b>	8	UN1801	II	CORROSIVE	N34	None	202	
	<b>Oil gas, compressed</b>	2.3 (2.1)	UN1071		POISON GAS, FLAMMABLE GAS	6	None	304	Not Accepted by FedEx Ground
	<b>Oleum, see Sulfuric acid, fuming</b>								
	<i>Organic peroxide type A, liquid or solid</i>	Forbid- den							
G	<b>Organic peroxide type B, liquid</b>	5.2 (1)	UN3101	II	ORGANIC PEROXIDE, EXPLOSIVE	53	152	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type B, liquid, temperature controlled</b>	5.2 (1)	UN3111	II	ORGANIC PEROXIDE, EXPLOSIVE	53	None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type B, solid</b>	5.2 (1)	UN3102	II	ORGANIC PEROXIDE, EXPLOSIVE	53	152	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type B, solid, temperature controlled</b>	5.2 (1)	UN3112	II	ORGANIC PEROXIDE, EXPLOSIVE	53	None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type C, liquid</b>	5.2	UN3103	II	ORGANIC PEROXIDE		152	225	
G	<b>Organic peroxide type C, liquid, temperature controlled</b>	5.2	UN3113	II	ORGANIC PEROXIDE		None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type C, solid</b>	5.2	UN3104	II	ORGANIC PEROXIDE		152	225	
G	<b>Organic peroxide type C, solid, temperature controlled</b>	5.2	UN3114	II	ORGANIC PEROXIDE		None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type D, liquid</b>	5.2	UN3105	II	ORGANIC PEROXIDE		152	225	
G	<b>Organic peroxide type D, liquid, temperature controlled</b>	5.2	UN3115	II	ORGANIC PEROXIDE		None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type D, solid</b>	5.2	UN3106	II	ORGANIC PEROXIDE		152	225	
G	<b>Organic peroxide type D, solid, temperature controlled</b>	5.2	UN3116	II	ORGANIC PEROXIDE		None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type E, liquid</b>	5.2	UN3107	II	ORGANIC PEROXIDE		152	225	
G	<b>Organic peroxide type E, liquid, temperature controlled</b>	5.2	UN3117	II	ORGANIC PEROXIDE		None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type E, solid</b>	5.2	UN3108	II	ORGANIC PEROXIDE		152	225	
G	<b>Organic peroxide type E, solid, temperature controlled</b>	5.2	UN3118	II	ORGANIC PEROXIDE		None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type F, liquid</b>	5.2	UN3109	II	ORGANIC PEROXIDE		152	225	
G	<b>Organic peroxide type F, liquid, temperature controlled</b>	5.2	UN3119	II	ORGANIC PEROXIDE		None	225	Not Accepted by FedEx Ground
G	<b>Organic peroxide type F, solid</b>	5.2	UN3110	II	ORGANIC PEROXIDE		152	225	
G	<b>Organic peroxide type F, solid, temperature controlled</b>	5.2	UN3120	II	ORGANIC PEROXIDE		None	225	Not Accepted by FedEx Ground
D	<b>Organic phosphate, mixed with compressed gas or Organic phosphate compound, mixed with compressed gas or Organic phosphorus compound, mixed with compressed gas</b>	2.3	NA1955		POISON GAS	3	None	334	Not Accepted by FedEx Ground
	<b>Organic pigments, self-heating</b>	4.2	UN3313	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	<b>Organic pigments, self-heating</b>	4.2	UN3313	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
G	<b>Organoarsenic compound, liquid, n.o.s.</b>	6.1	UN3280	I	POISON**	5	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Organoarsenic compound, liquid, n.o.s.	6.1	UN3280	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organoarsenic compound, liquid, n.o.s.	6.1	UN3280	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organoarsenic compound, solid, n.o.s.	6.1	UN3465	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organoarsenic compound, solid, n.o.s.	6.1	UN3465	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organoarsenic compound, solid, n.o.s.	6.1	UN3465	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides liquid, flammable, toxic, flashpoint less than 23 degrees C	3 (6.1)	UN2762	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides liquid, flammable, toxic, flashpoint less than 23 degrees C	3 (6.1)	UN2762	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, liquid, toxic	6.1	UN2996	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, liquid, toxic	6.1	UN2996	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, liquid, toxic	6.1	UN2996	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN2995	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN2995	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN2995	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, solid toxic	6.1	UN2761	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, solid toxic	6.1	UN2761	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organochlorine pesticides, solid toxic	6.1	UN2761	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic compound, toxic, liquid, n.o.s.	6.1	UN3282	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic compound, toxic, liquid, n.o.s.	6.1	UN3282	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic compound, toxic, liquid, n.o.s.	6.1	UN3282	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic compound, toxic, solid, n.o.s.	6.1	UN3467	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic compound, toxic, solid, n.o.s.	6.1	UN3467	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic compound, toxic, solid, n.o.s.	6.1	UN3467	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, liquid, pyrophoric	4.2	UN3392	I	SPONTANEOUSLY COMBUSTIBLE		None	181	Not Accepted by FedEx Ground
G	Organometallic substance, liquid, pyrophoric, water-reactive	4.2 (4.3)	UN3398	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET		None	201	Not Accepted by FedEx Ground
G	Organometallic substance, liquid, pyrophoric, water-reactive	4.3	UN3398	I	DANGEROUS WHEN WET**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, liquid, pyrophoric, water-reactive	4.3	UN3398	II	DANGEROUS WHEN WET**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, liquid, pyrophoric, water-reactive	4.3	UN3398	III	DANGEROUS WHEN WET**		None	203	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Organometallic substance, liquid, water-reactive, flammable	4.3 (3)	UN3399	I	DANGEROUS WHEN WET, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, liquid, water-reactive, flammable	4.3 (3)	UN3399	II	DANGEROUS WHEN WET, FLAMMABLE LIQUID**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, liquid, water-reactive, flammable	4.3 (3)	UN3399	III	DANGEROUS WHEN WET, FLAMMABLE LIQUID**		None	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, solid pyrophoric	4.2	UN3391	I	SPONTANEOUSLY COMBUSTIBLE		None	181	Not Accepted by FedEx Ground
G	Organometallic substance, solid, pyrophoric, water-reactive	4.2 (4.3)	UN3393	I	SPONTANEOUSLY COMBUSTIBLE, DANGEROUS WHEN WET		None	181	Not Accepted by FedEx Ground
G	Organometallic substance, solid, self-heating	4.2	UN3400	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
G	Organometallic substance, solid, self-heating	4.2	UN3400	III	SPONTANEOUSLY COMBUSTIBLE		None	203	Not Accepted by FedEx Ground
G	Organometallic substance, solid, water-reactive	4.3	UN3395	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, solid, water-reactive	4.3	UN3395	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, solid, water-reactive	4.3	UN3395	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, solid, water-reactive, flammable	4.3 (4.1)	UN3396	I	DANGEROUS WHEN WET, FLAMMABLE SOLID**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, solid, water-reactive, flammable	4.3 (4.1)	UN3396	II	DANGEROUS WHEN WET, FLAMMABLE SOLID**		151	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, solid, water-reactive, flammable	4.3 (4.1)	UN3396	III	DANGEROUS WHEN WET, FLAMMABLE SOLID**		151	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organometallic substance, solid, water-reactive, self-heating	4.3 (4.2)	UN3397	I	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE	N40	None	211	Not Accepted by FedEx Ground
G	Organometallic substance, solid, water-reactive, self-heating	4.3 (4.2)	UN3397	II	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
G	Organometallic substance, solid, water-reactive, self-heating	4.3 (4.2)	UN3397	III	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Organophosphorus compound, toxic, flammable, n.o.s.	6.1 (3)	UN3279	I	POISON, FLAMMABLE LIQUID**	5	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus compound, toxic, flammable, n.o.s.	6.1 (3)	UN3279	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organophosphorus compound, toxic, liquid, n.o.s.	6.1	UN3278	I	POISON**	5	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organophosphorus compound, toxic, liquid, n.o.s.	6.1	UN3278	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organophosphorus compound, toxic, liquid, n.o.s.	6.1	UN3278	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organophosphorus compound, toxic, solid, n.o.s.	6.1	UN3464	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organophosphorus compound, toxic, solid, n.o.s.	6.1	UN3464	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Organophosphorus compound, toxic, solid, n.o.s.	6.1	UN3464	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, liquid, flammable, toxic, <i>flashpoint less than 23 degrees C</i>	3 (6.1)	UN2784	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Organophosphorus pesticides, liquid, flammable, toxic, <i>flashpoint less than 23 degrees C</i>	3 (6.1)	UN2784	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, liquid, toxic	6.1	UN3018	I	POISON**	N76	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, liquid, toxic	6.1	UN3018	II	POISON**	N76	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, liquid, toxic	6.1	UN3018	III	POISON**	N76	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3017	I	POISON, FLAMMABLE LIQUID**	N76	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3017	II	POISON, FLAMMABLE LIQUID**	N76	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3017	III	POISON, FLAMMABLE LIQUID**	N76	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, solid, toxic	6.1	UN2783	I	POISON**	N77	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, solid, toxic	6.1	UN2783	II	POISON**	N77	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organophosphorus pesticides, solid, toxic	6.1	UN2783	III	POISON**	N77	153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin compounds, liquid, n.o.s.	6.1	UN2788	I	POISON**	N33,N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin compounds, liquid, n.o.s.	6.1	UN2788	II	POISON**	N33,N34	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin compounds, liquid, n.o.s.	6.1	UN2788	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin compounds, solid, n.o.s.	6.1	UN3146	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin compounds, solid, n.o.s.	6.1	UN3146	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin compounds, solid, n.o.s.	6.1	UN3146	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, liquid, flammable, toxic, <i>flashpoint less than 23 degrees C</i>	3 (6.1)	UN2787	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, liquid, flammable, toxic, <i>flashpoint less than 23 degrees C</i>	3 (6.1)	UN2787	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, liquid, toxic	6.1	UN3020	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, liquid, toxic	6.1	UN3020	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, liquid, toxic	6.1	UN3020	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3019	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3019	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3019	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, solid, toxic	6.1	UN2786	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Organotin pesticides, solid, toxic	6.1	UN2786	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Organotin pesticides, solid, toxic	6.1	UN2786	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Orthonitroaniline, see Nitroanilines etc.</i>								
	Osmium tetroxide	6.1	UN2471	I	POISON**	N33,N34	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
D,G	Other regulated substances, liquid, n.o.s.	9	NA3082	III	CLASS 9		155	203	
D,G	Other regulated substances, solid, n.o.s.	9	NA3077	III	CLASS 9		155	213	
G	Oxidizing liquid, corrosive, n.o.s.	5.1 (8)	UN3098	I	OXIDIZER, CORROSIVE		None	201	
G	Oxidizing liquid, corrosive, n.o.s.	5.1 (8)	UN3098	II	OXIDIZER, CORROSIVE		None	202	
G	Oxidizing liquid, corrosive, n.o.s.	5.1 (8)	UN3098	III	OXIDIZER, CORROSIVE		152	203	
G	Oxidizing liquid, n.o.s.	5.1	UN3139	I	OXIDIZER	127	152	201	
G	Oxidizing liquid, n.o.s.	5.1	UN3139	II	OXIDIZER	127	152	202	
G	Oxidizing liquid, n.o.s.	5.1	UN3139	III	OXIDIZER	127	152	203	
G	Oxidizing liquid, toxic, n.o.s.	5.1 (6.1)	UN3099	I	OXIDIZER, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Oxidizing liquid, toxic, n.o.s.	5.1 (6.1)	UN3099	II	OXIDIZER, POISON**		152	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Oxidizing liquid, toxic, n.o.s.	5.1 (6.1)	UN3099	III	OXIDIZER, POISON**		152	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Oxidizing solid, corrosive, n.o.s.	5.1 (8)	UN3085	I	OXIDIZER, CORROSIVE		None	211	
G	Oxidizing solid, corrosive, n.o.s.	5.1 (8)	UN3085	II	OXIDIZER, CORROSIVE		None	212	
G	Oxidizing solid, corrosive, n.o.s.	5.1 (8)	UN3085	III	OXIDIZER, CORROSIVE		152	213	
G	Oxidizing solid, flammable, n.o.s.	5.1 (4.1)	UN3137	I	OXIDIZER, FLAMMABLE SOLID		None	214	Not Accepted by FedEx Ground
G	Oxidizing solid, n.o.s.	5.1	UN1479	I	OXIDIZER		None	211	
G	Oxidizing solid, n.o.s.	5.1	UN1479	II	OXIDIZER		152	212	
G	Oxidizing solid, n.o.s.	5.1	UN1479	III	OXIDIZER		152	213	
G	Oxidizing solid, self-heating, n.o.s.	5.1 (4.2)	UN3100	I	OXIDIZER, SPONTANEOUSLY COMBUSTIBLE		None	214	Not Accepted by FedEx Ground
G	Oxidizing solid, self-heating, n.o.s.	5.1 (4.2)	UN3100	II	OXIDIZER, SPONTANEOUSLY COMBUSTIBLE		None	214	Not Accepted by FedEx Ground
G	Oxidizing solid, toxic, n.o.s.	5.1 (6.1)	UN3087	I	OXIDIZER, POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Oxidizing solid, toxic, n.o.s.	5.1 (6.1)	UN3087	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Oxidizing solid, toxic, n.o.s.	5.1 (6.1)	UN3087	III	OXIDIZER, POISON**		152	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Oxidizing solid, water-reactive, n.o.s.	5.1 (4.3)	UN3121		OXIDIZER, DANGEROUS WHEN WET		None	214	Not Accepted by FedEx Ground
	<i>Oxygen and carbon dioxide mixtures, see Carbon dioxide and oxygen mixtures</i>								
	Oxygen, compressed	2.2 (5.1)	UN1072		NONFLAMMABLE GAS, OXIDIZER**		306	302	OXYGEN label may be used in lieu of labels indicated in column 6- see 49CFR 172.405(b)
	Oxygen difluoride, compressed	2.3 (5.1, 8)	UN2190		POISON GAS, OXIDIZER, CORROSIVE	1	None	304	Not Accepted by FedEx Ground
	Oxygen generator, chemical (including when contained in associated equipment, e.g., passenger service units (PSUs), portable breathing equipment (PBE), etc)..	5.1	UN3356	II	OXIDIZER	60	None	212	
+	Oxygen generator, chemical, spent	9	NA3356	III	CLASS 9	61	None	213	
	<i>Oxygen, mixtures with rare gases, see Rare gases and oxygen mixtures</i>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Oxygen, refrigerated liquid</b> ( <i>cryogenic liquid</i> )	2.2 (5.1)	UN1073		NONFLAMMABLE GAS, OXIDIZER**		320	316	Accepted only when packaged under exception 49CFR 173.320
	<b>Paint</b> including paint, lacquer, enamel, satin, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base	3	UN1263	I	FLAMMABLE LIQUID**		150	201	See Paint section in this guide
	<b>Paint</b> including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base	3	UN1263	II	FLAMMABLE LIQUID**	149	150	173	See Paint section in this guide
	<b>Paint</b> including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base	3	UN1263	III	FLAMMABLE LIQUID**		150	173	See Paint section in this guide
	<b>Paint or Paint related material</b>	8	UN3066	II	CORROSIVE**		154	173	See Paint section in this guide
	<b>Paint or Paint related material</b>	8	UN3066	III	CORROSIVE**		154	173	See Paint section in this guide
	<b>Paint related material</b> including paint thinning, drying, removing, or reducing compound	3	UN1263	I	FLAMMABLE LIQUID**		150	201	See Paint section in this guide
	<b>Paint related material</b> including paint thinning, drying, removing, or reducing compound	3	UN1263	II	FLAMMABLE LIQUID**	149	150	173	See Paint section in this guide
	<b>Paint related material</b> including paint thinning, drying, removing, or reducing compound	3	UN1263	III	FLAMMABLE LIQUID**		150	173	See Paint section in this guide
	<b>Paper, unsaturated oil treated</b> <i>incompletely dried (including carbon paper)</i>	4.2	UN1379	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	<b>Paraformaldehyde</b>	4.1	UN2213	III	FLAMMABLE SOLID		151	213	
	<b>Paraldehyde</b>	3	UN1264	III	FLAMMABLE LIQUID		150	203	
	<i>Paranitroaniline, solid, see Nitroanilines etc.</i>								
D	<b>Parathion and compressed gas mixture</b>	2.3	NA1967		POISON GAS	3	None	334	Not Accepted by FedEx Ground
	<i>Paris green, solid, see Copper acetoarsenite</i>								
AW	<b>PCB, see Polychlorinated biphenyls</b>								
+	<b>Pentaborane</b>	4.2 (6.1)	UN1380	I	SPONTANEOUSLY COMBUSTIBLE, POISON	1	None	205	Not Accepted by FedEx Ground
	<b>Pentachloroethane</b>	6.1	UN1669	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	<b>Pentachlorophenol</b>	6.1	UN3155	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	<i>Pentaerythrite tetranitrate (dry)</i>	Forbid- den							
	<b>Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s. with more than 10 percent but not more than 20 percent PETN, by mass</b>	4.1	UN3344	II	FLAMMABLE SOLID	118, N85	None	214	Not Accepted by FedEx Ground
	<b>Pentaerythrite tetranitrate or Pentaerythritol tetranitrate or PETN, with not less than 7 percent wax by mass</b>	1.1D	UN0411	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Pentaerythrite tetranitrate, wetted or Pentaerythritol tetranitrate, wetted, or PETN, wetted with not less than 25 percent water, by mass, or Pentaerythrite tetranitrate, or Pentaerythritol tetranitrate or PETN, desensitized with not less than 15 percent phlegmatizer by mass</b>	1.1D	UN0150	II	EXPLOSIVE 1.1D	121	None	62	Not Accepted by FedEx Ground
	<b>Pentaerythritol tetranitrate, see Pentaerythrite tetranitrate, etc.</b>								
	<b>Pentafluoroethane or Refrigerant gas R 125</b>	2.2	UN3220		NONFLAMMABLE GAS		306	304	
	<b>Pentamethylheptane</b>	3	UN2286	III	FLAMMABLE LIQUID		150	203	
	<b>Pentane-2,4-dione</b>	3 (6.1)	UN2310	III	FLAMMABLE LIQUID, POISON**		150	203	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Pentanes</b>	3	UN1265	I	FLAMMABLE LIQUID		150	201	
	<b>Pentanes</b>	3	UN1265	II	FLAMMABLE LIQUID		150	202	
	<i>Pentanitroaniline (dry)</i>	Forbid- den							
	<b>Pentanols</b>	3	UN1105	II	FLAMMABLE LIQUID		150	202	
	<b>Pentanols</b>	3	UN1105	III	FLAMMABLE LIQUID		150	203	
	<i>Pentanitroaniline (dry)</i>	Forbid- den							
	<b>1-Pentene (n-amylene)</b>	3	UN1108	I	FLAMMABLE LIQUID		150	201	
	<b>1-Pentol</b>	8	UN2705	II	CORROSIVE		154	202	
	<b>Pentolite, dry or wetted with less than 15 percent water, by mass</b>	1.1D	UN0151	II	EXPLOSIVE 1.1D		None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Pepper spray, see Aerosols, etc. or Self-defense spray, non-pressurized</i>								
	<b>Perchlorates, inorganic, aqueous solution, n.o.s.</b>	5.1	UN3211	II	OXIDIZER		152	202	
	<b>Perchlorates, inorganic, aqueous solution, n.o.s.</b>	5.1	UN3211	III	OXIDIZER		152	203	
	<b>Perchlorates, inorganic, n.o.s.</b>	5.1	UN1481	II	OXIDIZER		152	212	
	<b>Perchlorates, inorganic, n.o.s.</b>	5.1	UN1481	III	OXIDIZER		152	213	
	<b>Perchloric acid with more than 50 percent but not more than 72 percent acid, by mass</b>	5.1 (8)	UN1873	I	OXIDIZER, CORROSIVE	N41	None	201	
	<i>Perchloric acid, with more than 72 percent acid by mass</i>	Forbid- den							
	<b>Perchloric acid with not more than 50 percent acid by mass</b>	8	UN1802	II	CORROSIVE, OXIDIZER	N41	None	202	
	<i>Perchloroethylene, see Tetrachloroethylene</i>								
	<b>Perchloromethyl mercaptan</b>	6.1	UN1670	I	POISON	2, N34	None	227	<b>Not Accepted by FedEx Ground</b>
	<b>Perchloryl fluoride</b>	2.3 (5.1)	UN3083		POISON GAS, OXIDIZER	2	None	302	<b>Not Accepted by FedEx Ground</b>
	<i>Percussion caps, see Primers, cap type</i>								
	<i>Perfluoro-2-butene, see Octafluorobut-2-ene</i>								
	<b>Perfluoro (ethyl vinyl ether)</b>	2.1	UN3154		FLAMMABLE GAS		306	302,304, 305	
	<b>Perfluoro (methyl vinyl ether)</b>	2.1	UN3153		FLAMMABLE GAS		306	302,304, 305	
	<b>Perfumery products with flammable solvents</b>	3	UN1266	II	FLAMMABLE LIQUID	149	150	202	
	<b>Perfumery products with flammable solvents</b>	3	UN1266	III	FLAMMABLE LIQUID		150	203	
	<b>Permanganates, inorganic, aqueous solution, n.o.s.</b>	5.1	UN3214	II	OXIDIZER	26	152	202	
	<b>Permanganates, inorganic, n.o.s.</b>	5.1	UN1482	II	OXIDIZER	26	152	212	
	<b>Permanganates, inorganic, n.o.s.</b>	5.1	UN1482	III	OXIDIZER	26	152	213	
	<b>Peroxides, inorganic, n.o.s.</b>	5.1	UN1483	II	OXIDIZER	N34	None	212	
	<b>Peroxides, inorganic, n.o.s.</b>	5.1	UN1483	III	OXIDIZER	N34	152	213	
	<i>Peroxyacetic acid, with more than 43 percent and with more than 6 percent hydrogen peroxide</i>	Forbid- den							
	<b>Persulfates, inorganic, aqueous solution, n.o.s.</b>	5.1	UN3216	III	OXIDIZER		152	203	
	<b>Persulfates, inorganic, n.o.s.</b>	5.1	UN3215	III	OXIDIZER		152	213	
G	<b>Pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN3021	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN3021	II	FLAMMABLE LIQUID, POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Pesticides, liquid, toxic, flammable, n.o.s. flashpoint not less than 23 degrees C</b>	6.1 (3)	UN2903	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Pesticides, liquid, toxic, flammable, n.o.s. flashpoint not less than 23 degrees C</b>	6.1 (3)	UN2903	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym- bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Pesticides, liquid, toxic, flammable, n.o.s. <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN2903	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Pesticides, liquid, toxic, n.o.s.	6.1	UN2902	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Pesticides, liquid, toxic, n.o.s.	6.1	UN2902	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Pesticides, liquid, toxic, n.o.s.	6.1	UN2902	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Pesticides, solid, toxic, n.o.s.	6.1	UN2588	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Pesticides, solid, toxic, n.o.s.	6.1	UN2588	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Pesticides, solid, toxic, n.o.s.	6.1	UN2588	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	PETN/TNT, <i>see</i> Pentolite, <i>etc.</i>								
	PETN, <i>see</i> Pentaerythrite tetranitrate								
	Petroleum crude oil	3	UN1267	I	FLAMMABLE LIQUID	144	150	201	
	Petroleum crude oil	3	UN1267	II	FLAMMABLE LIQUID	144	150	202	
	Petroleum crude oil	3	UN1267	III	FLAMMABLE LIQUID	144	150	203	
	Petroleum distillates, n.o.s. <i>or</i> Petroleum products, n.o.s.	3	UN1268	I	FLAMMABLE LIQUID		150	201	
	Petroleum distillates, n.o.s. <i>or</i> Petroleum products, n.o.s.	3	UN1268	II	FLAMMABLE LIQUID		150	202	
	Petroleum distillates, n.o.s. <i>or</i> Petroleum products, n.o.s.	3	UN1268	III	FLAMMABLE LIQUID		150	203	
	Petroleum gases, liquefied <i>or</i> Liquefied petroleum gas	2.1	UN1075		FLAMMABLE GAS		306	304	
D	Petroleum oil	3	NA1270	I	FLAMMABLE LIQUID		None	201	
D	Petroleum oil	3	NA1270	II	FLAMMABLE LIQUID		150	202	
D	Petroleum oil	3	NA1270	III	FLAMMABLE LIQUID		150	203	
	Petrol, <i>see</i> Gasoline								
	Phenacyl bromide	6.1	UN2645	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
+	Phenetidines	6.1	UN2311	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenol, molten	6.1	UN2312	II	POISON		None	202	Not Accepted by FedEx Ground
+	Phenol, solid	6.1	UN1671	II	POISON**	N78	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenol solutions	6.1	UN2821	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenol solutions	6.1	UN2821	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenolsulfonic acid, liquid	8	UN1803	II	CORROSIVE	N41	154	202	
	Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic <i>flashpoint less than 23 degrees C</i>	3 (6.1)	UN3346	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic <i>flashpoint less than 23 degrees C</i>	3 (6.1)	UN3346	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, liquid, toxic	6.1	UN3348	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, liquid, toxic	6.1	UN3348	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, liquid, toxic	6.1	UN3348	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3347	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN3347	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN3347	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, solid, toxic	6.1	UN3345	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, solid, toxic	6.1	UN3345	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenoxyacetic acid derivative pesticide, solid, toxic	6.1	UN3345	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenylacetoneitrile, liquid	6.1	UN2470	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenylacetyl chloride	8	UN2577	II	CORROSIVE		154	202	
	Phenylcarbylamine chloride	6.1	UN1672	I	POISON	2	None	227	<b>Not Accepted by FedEx Ground</b>
	Phenyl chloroformate	6.1 (8)	UN2746	II	POISON, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>m</i> -Phenylene diaminediperchlorate (dry)	Forbid- den							
+	Phenylenediamines ( <i>o</i> -; <i>m</i> -; <i>p</i> -')	6.1	UN1673	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenylhydrazine	6.1	UN2572	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenyl isocyanate	6.1 (3)	UN2487	I	POISON, FLAMMABLE LIQUID	2,N33,N34	None	227	<b>Not Accepted by FedEx Ground</b>
	Phenyl mercaptan	6.1 (3)	UN2337	I	POISON, FLAMMABLE LIQUID	2	None	227	<b>Not Accepted by FedEx Ground</b>
	Phenylmercuric acetate	6.1	UN1674	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenylmercuric compounds, n.o.s.	6.1	UN2026	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenylmercuric compounds, n.o.s.	6.1	UN2026	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenylmercuric compounds, n.o.s.	6.1	UN2026	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenylmercuric hydroxide	6.1	UN1894	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenylmercuric nitrate	6.1	UN1895	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenyl phosphorus dichloride	8	UN2798	II	CORROSIVE		154	202	
	Phenyl phosphorus thiodichloride	8	UN2799	II	CORROSIVE		154	202	
	Phenyltrichlorosilane	8	UN1804	II	CORROSIVE	N34	None	202	
	Phenyl urea pesticides, liquid, toxic	6.1	UN3002	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenyl urea pesticides, liquid, toxic	6.1	UN3002	II	POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phenyl urea pesticides, liquid, toxic	6.1	UN3002	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Phosgene	2.3 (8)	UN1076		DANGEROUS WHEN WET, CORROSIVE	1			<b>Not Accepted by FedEx Ground</b>
	9-Phosphabicyclononanes	4.2	UN2940	II	SPONTANEOUSLY COMBUSTIBLE		None	212	<b>Not Accepted by FedEx Ground</b>
	Phosphine	2.3 (2.1)	UN2199		POISON GAS, FLAMMABLE GAS	1	None	192	<b>Not Accepted by FedEx Ground</b>
	Phosphoric acid, solid	8	UN3453	III	CORROSIVE		154	213	
	Phosphoric acid solution	8	UN1805	III	CORROSIVE	N34	154	203	
	Phosphoric acid triethyleneimine, see Tris-(1-aziridyl)phosphine oxide, solution								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Phosphoric anhydride, see Phosphorus pentoxide</i>								
	<b>Phosphorous acid</b>	8	UN2834	III	CORROSIVE		154	213	
	<b>Phosphorus, amorphous</b>	4.1	UN1338	III	FLAMMABLE SOLID		None	213	
	<i>Phosphorus bromide, see Phosphorus tribromide</i>								
	<i>Phosphorus chloride, see Phosphorus trichloride</i>								
	<b>Phosphorus heptasulfide, free from yellow or white phosphorus</b>	4.1	UN1339	II	FLAMMABLE SOLID	N34	None	212	
	<b>Phosphorus oxybromide</b>	8	UN1939	II	CORROSIVE	N41, N43	None	212	
	<b>Phosphorus oxybromide, molten</b>	8	UN2576	II	CORROSIVE	N41, N43	None	202	Not Accepted by FedEx Ground
+	<b>Phosphorus oxychloride</b>	8 (6.1)	UN1810	II	CORROSIVE, POISON	2, N34	None	227	Not Accepted by FedEx Ground
	<b>Phosphorus pentabromide</b>	8	UN2691	II	CORROSIVE	N34	154	212	
	<b>Phosphorus pentachloride</b>	8	UN1806	II	CORROSIVE	N34	None	212	
	<b>Phosphorus pentafluoride</b>	2.3 (8)	UN2198		POISON GAS, CORROSIVE	2	None	302, 304	Not Accepted by FedEx Ground
	<b>Phosphorus pentasulfide, free from yellow or white phosphorus</b>	4.3 (4.1)	UN1340	II	DANGEROUS WHEN WET, FLAMMABLE SOLID		151	212	Not Accepted by FedEx Ground
	<b>Phosphorus pentoxide</b>	8	UN1807	II	CORROSIVE	N34	154	212	
	<b>Phosphorus sesquisulfide, free from yellow or white phosphorus</b>	4.1	UN1341	II	FLAMMABLE SOLID	N34	None	212	
	<b>Phosphorus tribromide</b>	8	UN1808	II	CORROSIVE	N34, N43	None	202	
	<b>Phosphorus trichloride</b>	6.1 (8)	UN1809	I	POISON, CORROSIVE	2, N34	None	227	Not Accepted by FedEx Ground
	<b>Phosphorus trioxide</b>	8	UN2578	III	CORROSIVE		154	213	
	<i>Phosphorus trisulfide, free from yellow or white phosphorus</i>	4.1	UN1343	II	FLAMMABLE SOLID	N34	None	212	
	<b>Phosphorus, white dry or Phosphorus, white, under water or Phosphorus white, in solution or Phosphorus, yellow dry or Phosphorus, yellow, under water or Phosphorus, yellow, in solution</b>	4.2 (6.1)	UN1381	I	SPONTANEOUSLY COMBUSTIBLE, POISON	N34	None	188	Not Accepted by FedEx Ground
	<b>Phosphorus white, molten</b>	4.2 (6.1)	UN2447	I	SPONTANEOUSLY COMBUSTIBLE, POISON	N34	None	188	Not Accepted by FedEx Ground
	<i>Phosphorus (white or red) and a chlorate, mixtures of</i>	Forbid- den							
	<i>Phosphoryl chloride, see Phosphorus oxychloride</i>								
	<b>Phthalic anhydride with more than .05 percent maleic anhydride</b>	8	UN2214	III	CORROSIVE		154	213	
	<b>Picolines</b>	3	UN2313	III	FLAMMABLE LIQUID		150	203	
	<i>Picric acid, see Trinitrophenol, etc.</i>								
	<i>Picrite, see Nitroguanidine, etc.</i>								
	<i>Picryl chloride, see Trinitrochlorobenzene</i>								
	<b>alpha-Pinene</b>	3	UN2368	III	FLAMMABLE LIQUID		150	203	
	<b>Pine oil</b>	3	UN1272	III	FLAMMABLE LIQUID		150	203	
	<b>Piperazine</b>	8	UN2579	III	CORROSIVE		154	213	
	<b>Piperidine</b>	8 (3)	UN2401	I	CORROSIVE, FLAMMABLE LIQUID		None	201	
	<i>Pivaloyl chloride, see Trimethylacetyl chloride</i>								
	<b>Plastic molding compound in dough, sheet or extruded rope form evolving flammable vapor</b>	9	UN3314	III	CLASS 9	32	155	221	
	<b>Plastics, nitrocellulose-based, self-heating, n.o.s.</b>	4.2	UN2006	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	<i>Plastic solvent, n.o.s., see Flammable liquids, n.o.s.</i>								
	<i>Poisonous gases, n.o.s., see Compressed or liquefied gases, flammable or toxic, n.o.s.</i>								
	<i>Polyalkylamines, n.o.s., see Amines, etc.</i>								
	<b>Polychlorinated biphenyls, liquid</b>	9	UN2315	II	CLASS 9	9, 81, 140	155	202	May not be regulated via highway. Not accepted if package exceeds 1 lb. (0.454kg) of PCB's- see RQ Table

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Polychlorinated biphenyls, <i>solid</i>	9	UN2315	II	CLASS 9	9, 81, 140	155	212	May not be regulated via highway. Not accepted if package exceeds 1 lb. (0.454kg) of PCB's- see RQ Table
	Polyester resin kit	3	UN3269		FLAMMABLE LIQUID	40, 149	152	225	See Special Provision 40 for Packing Group
	Polyhalogenated biphenyls, liquid <i>or</i> Polyhalogenated terphenyls liquid	9	UN3151	II	CLASS 9		155	204	
	Polyhalogenated biphenyls, solid <i>or</i> Polyhalogenated terphenyls, solid	9	UN3152	II	CLASS 9		155	204	
	Polymeric beads, expandable, <i>evolving flammable vapor</i>	9	UN2211	III	CLASS 9	32	155	221	
	Potassium	4.3	UN2257	I	DANGEROUS WHEN WET**	N6, N34	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium arsenate	6.1	UN1677	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	Potassium arsenite	6.1	UN1678	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<i>Potassium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i>								
	Potassium borohydride	4.3	UN1870	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium bromate	5.1	UN1484	II	OXIDIZER		152	212	
	<i>Potassium carbonyl</i>	Forbid- den							
	Potassium chlorate	5.1	UN1485	II	OXIDIZER	N34	152	212	
	Potassium chlorate, aqueous solution	5.1	UN2427	II	OXIDIZER		152	202	
	Potassium chlorate, aqueous solution	5.1	UN2427	III	OXIDIZER		152	203	
	<i>Potassium chlorate mixed with mineral oil, see Explosive, blasting, type C</i>								
	Potassium cuprocyanide	6.1	UN1679	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium cyanide, solid	6.1	UN1680	I	POISON**	N74, N75	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Potassium cyanide, solution	6.1	UN3413	I	POISON**	N47, N75	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Potassium cyanide, solution	6.1	UN3413	II	POISON**	N47, N75	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	Potassium cyanide, solution	6.1	UN3413	III	POISON**	N47, N75	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.54kg) per package- see RQ Table
	<i>Potassium dichloro isocyanurate or Potassium dichloro-s-triazinetrione, see Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts etc</i>								
	Potassium dithionite <i>or</i> Potassium hydrosulfite	4.2	UN1929	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Potassium fluoride, solid	6.1	UN1812	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium fluoride, solution	6.1	UN3422	III	POISON**		153	203	
	Potassium fluoroacetate	6.1	UN2628	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium fluorosilicate	6.1	UN2655	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Potassium hydrate, see Potassium hydroxide, solid</i>								
	Potassium hydrogendifluoride solid	8	UN1811	II	CORROSIVE, POISON**	N3, N34	154	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium hydrogendifluoride solution	8	UN3421	II	CORROSIVE, POISON**	N3, N34	154	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium hydrogendifluoride solution	8	UN3421	III	CORROSIVE, POISON**	N3, N34	154	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Potassium hydrogen fluoride, see Potassium hydrogen difluoride</i>								
	<i>Potassium hydrogen fluoride solution, see Corrosive liquid, n.o.s.</i>								
	Potassium hydrogen sulfate	8	UN2509	II	CORROSIVE	N34	154	212	
	<i>Potassium hydrosulfite, see Potassium dithionite</i>								
	<i>Potassium hydroxide, liquid, see Potassium hydroxide solution</i>								
	Potassium hydroxide, solid	8	UN1813	II	CORROSIVE		154	212	
	Potassium hydroxide, solution	8	UN1814	II	CORROSIVE		154	202	
	Potassium hydroxide, solution	8	UN1814	III	CORROSIVE		154	203	
	<i>Potassium hypochlorite, solution, see Hypochlorite solutions, etc.</i>								
	Potassium, metal alloys, liquid	4.3	UN1420	I	DANGEROUS WHEN WET**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium, metal alloys, solid	4.3	UN3403	I	DANGEROUS WHEN WET**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Potassium metal, liquid alloy, see Alkali metal alloys, liquid, n.o.s.</i>								
	Potassium metavanadate	6.1	UN2864	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium monoxide	8	UN2033	II	CORROSIVE		154	212	
	Potassium nitrate	5.1	UN1486	III	OXIDIZER		152	213	
	Potassium nitrate and sodium nitrite mixtures	5.1	UN1487	II	OXIDIZER		152	212	
	Potassium nitrite	5.1	UN1488	II	OXIDIZER		152	212	
	Potassium perchlorate	5.1	UN1489	II	OXIDIZER		152	212	
	Potassium permanganate	5.1	UN1490	II	OXIDIZER		152	212	
	Potassium peroxide	5.1	UN1491	I	OXIDIZER	N34	None	211	
	Potassium persulfate	5.1	UN1492	III	OXIDIZER		152	213	
	Potassium phosphide	4.3 (6.1)	UN2012	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Potassium selenate, see Selenates or Selenites</i>								
	<i>Potassium selenite, see Selenates or Selenites</i>								
	Potassium sodium alloys, liquids	4.3	UN1422	I	DANGEROUS WHEN WET**	N34, N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium sodium alloys, solid	4.3	UN3404	I	DANGEROUS WHEN WET**	N34, N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Potassium sulfide, anhydrous or Potassium sulfide with less than 30 percent water of crystallization	4.2	UN1382	II	SPONTANEOUSLY COMBUSTIBLE	N34	None	212	Not Accepted by FedEx Ground
	Potassium sulfide, hydrated with not less than 30 percent water of crystallization	8	UN1847	II	CORROSIVE		154	212	
	Potassium superoxide	5.1	UN2466	I	OXIDIZER		None	211	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)		FedEx Ground Restrictions	
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions		NonBulk
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Powder cake, wetted or Powder paste, wetted with not less than 17 percent alcohol by mass</b>	1.1C	UN0433	II	EXPLOSIVE 1.1C		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Powder cake, wetted or Powder paste, wetted with not less than 25 percent water, by mass</b>	1.3C	UN0159	II	EXPLOSIVE 1.3C		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Powder paste, see Powder cake, etc.</b>								
	<b>Powder, smokeless</b>	1.1C	UN0160	II	EXPLOSIVE 1.1C		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Powder, smokeless</b>	1.3C	UN0161	II	EXPLOSIVE 1.3C		None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Power device, explosive, see Cartridges, power device</i>								
	<b>Primers, cap type</b>	1.4S	UN0044	II	NONE		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Primers, cap type</b>	1.1B	UN0377	II	EXPLOSIVE 1.1B		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Primers, cap type</b>	1.4B	UN0378	II	EXPLOSIVE 1.4B		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Primers, small arms, see Primers, cap type</i>								
	<b>Primers, tubular</b>	1.3G	UN0319	II	EXPLOSIVE 1.3G		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Primers, tubular</b>	1.4G	UN0320	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Primers, tubular</b>	1.4S	UN0376	II	NONE		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Printing ink, flammable or Printing ink related material (including printing ink thinning or reducing compound), flammable</b>	3	UN1210	I	FLAMMABLE LIQUID		150	173	
	<b>Printing ink, flammable or Printing ink related material (including printing ink thinning or reducing compound), flammable</b>	3	UN1210	II	FLAMMABLE LIQUID		150	173	
	<b>Printing ink, flammable or Printing ink related material (including printing ink thinning or reducing compound), flammable</b>	3	UN1210	III	FLAMMABLE LIQUID		150	173	
	<i>Projectiles, illuminating, see Ammunition, illuminating, etc.</i>								
	<b>Projectiles, inert with tracer</b>	1.4S	UN0345	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Projectiles, inert, with tracer</b>	1.3G	UN0424	II	EXPLOSIVE 1.3G		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Projectiles, inert, with tracer</b>	1.4G	UN0425	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Projectiles, with burster or expelling charge</b>	1.2D	UN0346	II	EXPLOSIVE 1.2D		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Projectiles, with burster or expelling charge</b>	1.4D	UN0347	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Projectiles, with burster or expelling charge</b>	1.2F	UN0426	II	EXPLOSIVE 1.2F		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Projectiles, with burster or expelling charge</b>	1.4F	UN0427	II	EXPLOSIVE 1.4F		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Projectiles, with burster or expelling charge</b>	1.2G	UN0434	II	EXPLOSIVE 1.2G		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Projectiles, with burster or expelling charge</b>	1.4G	UN0435	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Projectiles, with bursting charge</b>	1.1F	UN0167	II	EXPLOSIVE 1.1F		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Projectiles, with bursting charge</b>	1.1D	UN0168	II	EXPLOSIVE 1.1D		None	62	<b>Not Accepted by FedEx Ground</b>

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Projectiles, with bursting charge</i>	1.2D	UN0169	II	EXPLOSIVE 1.2D		None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Projectiles, with bursting charge</i>	1.2F	UN0324	II	EXPLOSIVE 1.2F		None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Projectiles, with bursting charge</i>	1.4D	UN0344	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Propadiene mixed with methyl acetylene, see Methyl acetylene and propadiene mixtures, stabilized</i>								
	<b>Propadiene, stabilized</b>	2.1	UN2200		FLAMMABLE GAS		None	304	
	<b>Propane</b> <i>see also</i> Petroleum gases, liquefied	2.1	UN1978		FLAMMABLE GAS	19	306	304	
	<b>Propanethiols</b>	3	UN2402	II	FLAMMABLE LIQUID		150	202	
	<b>n-Propanol</b> <i>or</i> Propyl alcohol, normal	3	UN1274	II	FLAMMABLE LIQUID		150	202	
	<b>n-Propanol</b> <i>or</i> Propyl alcohol, normal	3	UN1274	III	FLAMMABLE LIQUID		150	203	
	<b>Propellant, liquid</b>	1.3C	UN0495	II	EXPLOSIVE 1.3C	37	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Propellant, liquid</b>	1.1C	UN0497	II	EXPLOSIVE 1.1C	37	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Propellant, solid</b>	1.4C	UN0501		EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>Propellant, solid</b>	1.1C	UN0498	II	EXPLOSIVE 1.1C		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Propellant, solid</b>	1.3C	UN0499	II	EXPLOSIVE 1.3C		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Propionaldehyde</b>	3	UN1275	II	FLAMMABLE LIQUID		150	202	
	<b>Propionic acid</b>	8	UN1848	III	CORROSIVE		154	203	
	<b>Propionic anhydride</b>	8	UN2496	III	CORROSIVE		154	203	
	<b>Propionitrile</b>	3 (6.1)	UN2404	II	FLAMMABLE LIQUID, POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Propionyl chloride</b>	3 (8)	UN1815	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<b>n-Propyl acetate</b>	3	UN1276	II	FLAMMABLE LIQUID		150	202	
	<b>Propyl alcohol, see Propanol</b>								
	<b>Propylamine</b>	3 (8)	UN1277	II	FLAMMABLE LIQUID, CORROSIVE	N34	150	202	
	<b>n-Propyl benzene</b>	3	UN2364	III	FLAMMABLE LIQUID		150	203	
	<i>Propyl chloride see 1-Chloropropane</i>								
	<b>n-Propyl chloroformate</b>	6.1 (3, 8)	UN2740	I	POISON, FLAMMABLE LIQUID, CORROSIVE	2, N34	None	227	<b>Not Accepted by FedEx Ground</b>
	<b>Propylene chlorohydrin</b>	6.1 (3)	UN2611	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Propyleneimine, stabilized</b>	3 (6.1)	UN1921	I	FLAMMABLE LIQUID, POISON**	N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Propylene oxide</b>	3	UN1280	I	FLAMMABLE LIQUID	N34	None	201	
	<b>Propylene</b> <i>see also</i> Petroleum gases, liquefied	2.1	UN1077		FLAMMABLE GAS	19	306	304	
	<b>Propylene tetramer</b>	3	UN2850	III	FLAMMABLE LIQUID		150	203	
	<b>Propyl formates</b>	3	UN1281	II	FLAMMABLE LIQUID		150	202	
	<b>n-Propyl isocyanate</b>	6.1	UN2482	I	POISON, FLAMMABLE LIQUID	1	None	226	<b>Not Accepted by FedEx Ground</b>
	<i>Propyl mercaptan, see Propanethiols</i>								
	<b>n-Propyl nitrate</b>	3	UN1865	II	FLAMMABLE LIQUID		150	202	
	<b>Propyltrichlorosilane</b>	8 (3)	UN1816	II	CORROSIVE, FLAMMABLE LIQUID	N34	None	202	
	<i>Prussic acid, see Hydrogen cyanide</i>								
	<b>Pyrethroid pesticide, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN3350	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Pyrethroid pesticide, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN3350	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Pyrethroid pesticide, liquid, toxic	6.1	UN3352	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyrethroid pesticide, liquid, toxic	6.1	UN3352	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyrethroid pesticide, liquid, toxic	6.1	UN3352	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint not less than 23 degrees C</i>	6.1	UN3351	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint not less than 23 degrees C</i>	6.1	UN3351	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint not less than 23 degrees C</i>	6.1	UN3351	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyrethroid pesticide, solid, toxic	6.1	UN3349	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyrethroid pesticide, solid, toxic	6.1	UN3349	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyrethroid pesticide, solid, toxic	6.1	UN3349	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Pyridine	3	UN1282	II	FLAMMABLE LIQUID		None	202	
	<i>Pyridine perchlorate</i>	Forbid-den							
G	Pyrophoric liquid, inorganic, n.o.s.	4.2	UN3194	I	SPONTANEOUSLY COMBUSTIBLE		None	181	Not Accepted by FedEx Ground
G	Pyrophoric liquids, organic, n.o.s.	4.2	UN2845	I	SPONTANEOUSLY COMBUSTIBLE		None	181	Not Accepted by FedEx Ground
G	Pyrophoric metals, n.o.s. or Pyrophoric alloys, n.o.s.	4.2	UN1383	I	SPONTANEOUSLY COMBUSTIBLE		None	187	Not Accepted by FedEx Ground
G	Pyrophoric solid, inorganic, n.o.s.	4.2	UN3200	I	SPONTANEOUSLY COMBUSTIBLE		None	187	Not Accepted by FedEx Ground
G	Pyrophoric solids, organic, n.o.s.	4.2	UN2846	I	SPONTANEOUSLY COMBUSTIBLE		None	187	Not Accepted by FedEx Ground
	Pyrosulfuryl chloride	8	UN1817	II	CORROSIVE		154	202	
	<i>Pyroxylin solution or solvent, see Nitrocellulose</i>								
	Pyrrolidine	3 (8)	UN1922	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	<i>Quebrachitol pentanitrate</i>	Forbid-den							
	<i>Quicklime, see Calcium oxide</i>								
	Quinoline	6.1	UN2656	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>R 114, see Dichlorotetrafluoroethane</i>								
	<i>R 115, see Chloropentafluoroethane</i>								
	<i>R 116, see Hexafluoroethane</i>								
	<i>R 124, see Chlorotetrafluoroethane</i>								
	<i>R 12B1, see Chlorodifluorobromomethane</i>								
	<i>R 12, see Dichlorodifluoromethane</i>								
	<i>R 133a, see Chlorotrifluoroethane</i>								
	<i>R 13B1, see Bromotrifluoromethane</i>								
	<i>R 13, see Chlorotrifluoromethane</i>								
	<i>R 14, see Tetrafluoromethane</i>								
	<i>R 152a, see Difluoroethane</i>								
	<i>R 21, see Dichlorofluoromethane</i>								
	<i>R 22, see Chlorodifluoromethane</i>								
	<i>R 500, see Dichlorodifluoromethane and difluoroethane, etc.</i>								
	<i>R 502, see Chlorodifluoromethane and chloropentafluoroethane mixture, etc.</i>								
	<i>R 503, see Chlorotrifluoromethane and trifluoromethane, etc.</i>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Radioactive material, excepted package-articles manufactured from natural uranium or depleted uranium or natural thorium	7	UN2909		NONE**		422, 426	422, 426	See Radioactive section of this Guide
	Radioactive material, excepted package-empty packaging	7	UN2908		EMPTY**		422, 428	422, 428	See Radioactive section of this Guide
	Radioactive material, excepted package-instruments or articles	7	UN2911		NONE**		422, 424	422, 424	See Radioactive section of this Guide
	Radioactive material, excepted package-limited quantity of material	7	UN2910		NONE**		421, 422	421, 422	See Radioactive section of this Guide
	Radioactive material, low specific activity (LSA-III) non fissile or fissile excepted	7	UN3322		RADIOACTIVE WHITE I**		421, 422, 428	427	See Radioactive section of this Guide
	Radioactive material, low specific activity (LSA-II) non fissile or fissile-excepted	7	UN3321		RADIOACTIVE WHITE I**		421, 422, 428	427	See Radioactive section of this Guide
	Radioactive material, low specific activity (LSA-I) non fissile or fissile-excepted	7	UN2912		RADIOACTIVE WHITE I**		421, 422, 428	427	See Radioactive section of this Guide
	Radioactive material, surface contaminated objects (SCO-I or SCO-II) non fissile or fissile-excepted	7	UN2913		RADIOACTIVE WHITE I**		421, 422, 428	427	See Radioactive section of this Guide
	Radioactive material, transported under special arrangement, fissile	7	UN3331		RADIOACTIVE	139			Not Accepted by FedEx Ground
	Radioactive material, transported under special arrangement, non fissile or fissile excepted	7	UN2919		RADIOACTIVE	139			Not Accepted by FedEx Ground
	Radioactive material, Type A package, fissile non-special form	7	UN3327		RADIOACTIVE		453	417	Not Accepted by FedEx Ground
	Radioactive material, Type A package, non-special form, non fissile or fissile-excepted	7	UN2915		RADIOACTIVE WHITE I**			415, 418	See Radioactive section of this Guide
	Radioactive material, Type A package, special form, fissile	7	UN3333		RADIOACTIVE		453	417, 476	Not Accepted by FedEx Ground
	Radioactive material, Type A package special form non fissile or fissile-excepted	7	UN3332		RADIOACTIVE WHITE I**			415, 476	See Radioactive section of this Guide
	Radioactive material, Type B(M) package, fissile	7	UN3329		RADIOACTIVE		453	417	Not Accepted by FedEx Ground
	Radioactive material, Type B(M) package non fissile or fissile-excepted	7	UN2917		RADIOACTIVE			416	Not Accepted by FedEx Ground
	Radioactive material, Type B(U) package, fissile	7	UN3328		RADIOACTIVE		453	417	Not Accepted by FedEx Ground
	Radioactive material, Type B(U) package non fissile or fissile-excepted	7	UN2916		RADIOACTIVE			416	Not Accepted by FedEx Ground
I	Radioactive material, uranium hexafluoride, fissile	7 (8)	UN2977		RADIOACTIVE,CORROSIVE		453	417, 420	Not Accepted by FedEx Ground
	Radioactive material, uranium hexafluoride non fissile or fissile-excepted	7 (8)	UN2978		RADIOACTIVE,CORROSIVE				Not Accepted by FedEx Ground
A W	Rags, oily	4.2	UN1856	III	SPONTANEOUSLY COMBUSTIBLE		151	213	Not Accepted by FedEx Ground
	Railway torpedo, see Signals, railway track, explosive								
	Rare gases and nitrogen mixtures, compressed	2.2	UN1981		NONFLAMMABLE GAS		306	302	
	Rare gases and oxygen mixtures, compressed	2.2	UN1980		NONFLAMMABLE GAS	79	306	302	
	Rare gases, mixtures, compressed	2.2	UN1979		NONFLAMMABLE GAS		306	302	
	RC 318, see Octafluorocyclobutane								
	RDX and cyclotetramethylenetetranitramine, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized								
	RDX and HMX mixtures, wetted with not less than 15 percent water by mass or RDX and HMX mixtures, desensitized with not less than 10 percent phlegmatizer by mass	1.1D	UN0391	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	RDX and Octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.								
	RDX, see Cyclotrimethylene trinitramine, etc.								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				PG	Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers					Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)	
	Receptacles, small, containing gas (gas cartridges) <i>flammable, without release device, not refillable and not exceeding 1 L capacity</i>	2.1	UN2037		FLAMMABLE GAS		306	304		
	Receptacles, small, containing gas (gas cartridges) <i>non-flammable, without release device, not refillable and not exceeding 1 L capacity</i>	2.2	UN2037		NONFLAMMABLE GAS		306	304		
	Receptacles, small, containing gas (gas cartridges) <i>non-flammable, without release device, not refillable and not exceeding 1 L capacity</i>	2.2 (5.1)	UN2037		NONFLAMMABLE GAS, OXIDIZER		306	304		
	<i>Red phosphorus, see Phosphorus, amorphous</i>									
G	Refrigerant gases, n.o.s.	2.2	UN1078		NONFLAMMABLE GAS		306	304		
D	Refrigerant gases, n.o.s. or Dispersant gases, n.o.s.	2.1	NA1954		FLAMMABLE GAS		306	306		
	Refrigerant gas R 404A	2.2	UN3337		NONFLAMMABLE GAS		306	304		
	Refrigerant gas R 407A	2.2	UN3338		NONFLAMMABLE GAS		306	304		
	Refrigerant gas R 407B	2.2	UN3339		NONFLAMMABLE GAS		306	304		
	Refrigerant gas R 407C	2.2	UN3340		NONFLAMMABLE GAS		306	304		
	Refrigerating machines, containing flammable, non-toxic, liquefied gas	2.1	UN3358		FLAMMABLE GAS		306	306		
	Refrigerating machines, containing non-flammable, non-toxic, or ammonia solution (UN2672)	2.2	UN2857		NONFLAMMABLE GAS		306, 307	306		
	Regulated medical waste	6.2	UN3291	II	INFECTIOUS SUBSTANCE		134	197	<b>Not Accepted by FedEx Ground</b>	
	Release devices, explosive	1.4S	UN0173	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)	
	Resin solution, flammable	3	UN1866	I	FLAMMABLE LIQUID		150	201		
	Resin solution, flammable	3	UN1866	II	FLAMMABLE LIQUID		150	173		
	Resin solution, flammable	3	UN1866	III	FLAMMABLE LIQUID		150	173		
	Resorcinol	6.1	UN2876	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13	
	<i>Rifle grenade, see Grenades, hand or rifle, etc.</i>									
	<i>Rifle powder, see Powder, smokeless (UN 0160)</i>									
	Rivets, explosive	1.4S	UN0174	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)	
	<i>Road asphalt or tar liquid, see Tars, liquid, etc.</i>									
	Rocket motors	1.3C	UN0186	II	EXPLOSIVE 1.3C	109	None	62	<b>Not Accepted by FedEx Ground</b>	
	Rocket motors	1.1C	UN0280	II	EXPLOSIVE 1.1C	109	None	62	<b>Not Accepted by FedEx Ground</b>	
	Rocket motors	1.2C	UN0281	II	EXPLOSIVE 1.2C	109	None	62	<b>Not Accepted by FedEx Ground</b>	
	Rocket motors, liquid fueled	1.2J	UN0395	II	EXPLOSIVE 1.2J	109	None	62	<b>Not Accepted by FedEx Ground</b>	
	Rocket motors, liquid fueled	1.3J	UN0396	II	EXPLOSIVE 1.3J	109	None	62	<b>Not Accepted by FedEx Ground</b>	
	Rocket motors with hypergolic liquids with or without an expelling charge	1.3L	UN0250	II	EXPLOSIVE 1.3L	109	None	62	<b>Not Accepted by FedEx Ground</b>	
	Rocket motors with hypergolic liquids with or without an expelling charge	1.2L	UN0322	II	EXPLOSIVE 1.2L	109	None	62	<b>Not Accepted by FedEx Ground</b>	
	Rockets, line-throwing	1.2G	UN0238	II	EXPLOSIVE 1.2G		None	62	<b>Not Accepted by FedEx Ground</b>	
	Rockets, line-throwing	1.3G	UN0240	II	EXPLOSIVE 1.3G		None	62	<b>Not Accepted by FedEx Ground</b>	
	Rockets, line-throwing	1.4G	UN0453	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)	
	Rockets, liquid fueled with bursting charge	1.1J	UN0397	II	EXPLOSIVE 1.1J		None	62	<b>Not Accepted by FedEx Ground</b>	
	Rockets, liquid fueled with bursting charge	1.2J	UN0398	II	EXPLOSIVE 1.2J		None	62	<b>Not Accepted by FedEx Ground</b>	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes		Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Rockets, with bursting charge	1.1E	UN0181	II	EXPLOSIVE 1.1E		None	62	Not Accepted by FedEx Ground
	Rockets, with bursting charge	1.2E	UN0182	II	EXPLOSIVE 1.2E		None	62	Not Accepted by FedEx Ground
	Rockets, with bursting charge	1.2F	UN0295	II	EXPLOSIVE 1.2F		None	62	Not Accepted by FedEx Ground
	Rockets, with bursting charge	1.1F	UN0180	II	EXPLOSIVE 1.1F		None	62	Not Accepted by FedEx Ground
	Rockets, with expelling charge	1.2C	UN0436	II	EXPLOSIVE 1.2C		None	62	Not Accepted by FedEx Ground
	Rockets, with expelling charge	1.3C	UN0437	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Rockets, with expelling charge	1.4C	UN0438	II	EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Rockets, with inert head	1.3C	UN0183	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Rockets, with inert head	1.2C	UN0502		EXPLOSIVE 1.2C		None	62	Not Accepted by FedEx Ground
	Rosin oil	3	UN1286	II	FLAMMABLE LIQUID		150	202	
	Rosin oil	3	UN1286	III	FLAMMABLE LIQUID		150	203	
	Rubber scrap or shoddy, powdered or granulated, not exceeding 840 microns and rubber contend exceeding 45%	4.1	UN1345	II	FLAMMABLE SOLID		151	212	
	Rubber solution	3	UN1287	II	FLAMMABLE LIQUID	149	150	202	
	Rubber solution	3	UN1287	III	FLAMMABLE LIQUID		150	203	
	Rubidium	4.3	UN1423	I	DANGEROUS WHEN WET**	22, N34, N40, N45	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Rubidium hydroxide	8	UN2678	II	CORROSIVE		154	212	
	Rubidium hydroxide solution	8	UN2677	II	CORROSIVE		154	202	
	Rubidium hydroxide solution	8	UN2677	III	CORROSIVE		154	203	
	Safety fuse, see Fuse, safety								
G	Samples, explosive, other than initiating explosives		UN0190	II	NONE	113	None	62	Not Accepted by FedEx Ground
	Sand acid, see Fluorosilicic acid								
	Seed cake, containing vegetable oil solvent extractions and expelled seeds, with not more than 10 percent of oil and when the amount of moisture is higher than 11 percent, with not more than 20 percent of oil and moisture combined.	4.2	UN1386	III	NONE	N7	None	213	Not Accepted by FedEx Ground
I	Seed cake with more than 1.5 percent oil and not more than 11 percent moisture	4.2	UN1386	III	NONE	N7	None	213	Not Accepted by FedEx Ground
I	Seed cake with not more than 1.5 percent oil and not more than 11 percent moisture	4.2	UN2217	III	NONE	N7	None	213	Not Accepted by FedEx Ground
	Selenates or Selenites	6.1	UN2630	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Selenic acid	8	UN1905	I	CORROSIVE	N34	None	211	
	Selenium compound, liquid, n.o.s.	6.1	UN3440	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Selenium compound, liquid, n.o.s.	6.1	UN3440	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Selenium compound, liquid, n.o.s.	6.1	UN3440	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Selenium compound, solid, n.o.s.	6.1	UN3283	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Selenium compound, solid, n.o.s.	6.1	UN3283	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Selenium compound, solid, n.o.s.	6.1	UN3283	III	POISON**		153	2123	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Selenium disulfide	6.1	UN2657	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Selenium hexafluoride	2.3 (8)	UN2194		POISON GAS, CORROSIVE	1	None	302	Not Accepted by FedEx Ground
	<i>Selenium nitride</i>	Forbid- den							
	<i>Self-defense spray, aerosol, see Aerosols, etc.</i>								
+AD	Self-defense spray, non-pressurized	9	NA3334	III	CLASS 9		155	203	
G	Self-heating liquid, corrosive, inorganic, n.o.s.	4.2 (8)	UN3188	II	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	202	Not Accepted by FedEx Ground
G	Self-heating liquid, corrosive, inorganic, n.o.s.	4.2 (8)	UN3188	III	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	203	Not Accepted by FedEx Ground
G	Self-heating liquid, corrosive, organic, n.o.s.	4.2 (8)	UN3185	II	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	202	Not Accepted by FedEx Ground
G	Self-heating liquid, corrosive, organic, n.o.s.	4.2 (8)	UN3185	III	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	203	Not Accepted by FedEx Ground
G	Self-heating liquid, inorganic, n.o.s.	4.2	UN3186	II	SPONTANEOUSLY COMBUSTIBLE		None	202	Not Accepted by FedEx Ground
G	Self-heating liquid, inorganic, n.o.s.	4.2	UN3186	III	SPONTANEOUSLY COMBUSTIBLE		None	203	Not Accepted by FedEx Ground
G	Self-heating liquid, organic, n.o.s.	4.2	UN3183	II	SPONTANEOUSLY COMBUSTIBLE		None	202	Not Accepted by FedEx Ground
G	Self-heating liquid, organic, n.o.s.	4.2	UN3183	III	SPONTANEOUSLY COMBUSTIBLE		None	203	Not Accepted by FedEx Ground
G	Self-heating liquid, toxic, inorganic, n.o.s.	4.2 (6.1)	UN3187	II	SPONTANEOUSLY COMBUSTIBLE, POISON		None	202	Not Accepted by FedEx Ground
G	Self-heating liquid, toxic, inorganic, n.o.s.	4.2 (6.1)	UN3187	III	SPONTANEOUSLY COMBUSTIBLE, POISON		None	203	Not Accepted by FedEx Ground
G	Self-heating liquid, toxic, organic, n.o.s.	4.2 (6.1)	UN3184	II	SPONTANEOUSLY COMBUSTIBLE, POISON		None	202	Not Accepted by FedEx Ground
G	Self-heating liquid, toxic, organic, n.o.s.	4.2 (6.1)	UN3184	III	SPONTANEOUSLY COMBUSTIBLE, POISON		None	203	Not Accepted by FedEx Ground
G	Self-heating solid, corrosive, inorganic, n.o.s.	4.2 (8)	UN3192	II	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	212	Not Accepted by FedEx Ground
G	Self-heating solid, corrosive, inorganic, n.o.s.	4.2 (8)	UN3192	III	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	213	Not Accepted by FedEx Ground
G	Self-heating, solid, corrosive, organic, n.o.s.	4.2 (8)	UN3126	II	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	212	Not Accepted by FedEx Ground
G	Self-heating, solid, corrosive, organic, n.o.s.	4.2 (8)	UN3126	III	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	213	Not Accepted by FedEx Ground
G	Self-heating solid, inorganic, n.o.s.	4.2	UN3190	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
G	Self-heating solid, inorganic, n.o.s.	4.2	UN3190	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
G	Self-heating, solid, organic, n.o.s.	4.2	UN3088	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
G	Self-heating, solid, organic, n.o.s.	4.2	UN3088	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
G	Self-heating, solid, oxidizing, n.o.s.	4.2 (5.1)	UN3127		SPONTANEOUSLY COMBUSTIBLE, OXIDIZER		None	214	Not Accepted by FedEx Ground
G	Self-heating solid, toxic, inorganic, n.o.s.	4.2 (6.1)	UN3191	II	SPONTANEOUSLY COMBUSTIBLE, POISON		None	212	Not Accepted by FedEx Ground
G	Self-heating solid, toxic, inorganic, n.o.s.	4.2 (6.1)	UN3191	III	SPONTANEOUSLY COMBUSTIBLE, POISON		None	213	Not Accepted by FedEx Ground
G	Self-heating, solid, toxic, organic, n.o.s.	4.2 (6.1)	UN3128	II	SPONTANEOUSLY COMBUSTIBLE, POISON		None	212	Not Accepted by FedEx Ground
G	Self-heating, solid, toxic, organic, n.o.s.	4.2 (6.1)	UN3128	III	SPONTANEOUSLY COMBUSTIBLE, POISON		None	213	Not Accepted by FedEx Ground
	<i>Self-propelled vehicle, see Engines or Batteries etc.</i>								
G	Self-reactive liquid type B	4.1	UN3221	II	FLAMMABLE SOLID	53	None	224	Not Accepted by FedEx Ground
G	Self-reactive liquid type B, temperature controlled	4.1	UN3231	II	FLAMMABLE SOLID	53	None	224	Not Accepted by FedEx Ground
G	Self-reactive liquid type C	4.1	UN3223	II	FLAMMABLE SOLID		None	224	
G	Self-reactive liquid type C, temperature controlled	4.1	UN3233	II	FLAMMABLE SOLID		None	224	Not Accepted by FedEx Ground
G	Self-reactive liquid type D	4.1	UN3225	II	FLAMMABLE SOLID		None	224	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Self-reactive liquid type D, temperature controlled	4.1	UN3235	II	FLAMMABLE SOLID		None	224	Not Accepted by FedEx Ground
G	Self-reactive liquid type E	4.1	UN3227	II	FLAMMABLE SOLID		None	224	
G	Self-reactive liquid type E, temperature controlled	4.1	UN3237	II	FLAMMABLE SOLID		None	224	Not Accepted by FedEx Ground
G	Self-reactive liquid type F	4.1	UN3229	II	FLAMMABLE SOLID		None	224	
G	Self-reactive liquid type F, temperature controlled	4.1	UN3239	II	FLAMMABLE SOLID		None	224	Not Accepted by FedEx Ground
G	Self-reactive solid type B	4.1	UN3222	II	FLAMMABLE SOLID	53	None	224	
G	Self-reactive solid type B, temperature controlled	4.1	UN3232	II	FLAMMABLE SOLID	53	None	224	Not Accepted by FedEx Ground
G	Self-reactive solid type C	4.1	UN3224	II	FLAMMABLE SOLID		None	224	
G	Self-reactive solid type C, temperature controlled	4.1	UN3234	II	FLAMMABLE SOLID		None	224	Not Accepted by FedEx Ground
G	Self-reactive solid type D	4.1	UN3226	II	FLAMMABLE SOLID		None	224	
G	Self-reactive solid type D, temperature controlled	4.1	UN3236	II	FLAMMABLE SOLID		None	224	Not Accepted by FedEx Ground
G	Self-reactive solid type E	4.1	UN3228	II	FLAMMABLE SOLID		None	224	
G	Self-reactive solid type E, temperature controlled	4.1	UN3238	II	FLAMMABLE SOLID		None	224	Not Accepted by FedEx Ground
G	Self-reactive solid type F	4.1	UN3230	II	FLAMMABLE SOLID		None	224	
G	Self-reactive solid type F, temperature controlled	4.1	UN3240	II	FLAMMABLE SOLID		None	224	Not Accepted by FedEx Ground
	Shale oil	3	UN1288	I	FLAMMABLE LIQUID		None	201	
	Shale oil	3	UN1288	II	FLAMMABLE LIQUID		150	202	
	Shale oil	3	UN1288	III	FLAMMABLE LIQUID		150	203	
	<i>Shaped charges, commercial, see Charges, shaped, etc.</i>								
	Signal devices, hand	1.4G	UN0191	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Signal devices, hand	1.4S	UN0373	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Signals, distress, ship	1.1G	UN0194	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	Signals, distress, ship	1.3G	UN0195	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	<i>Signals, highway, see Signal devices, hand</i>								
	Signals, railway track, explosive	1.1G	UN0192	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	Signals, railway track, explosive	1.4S	UN0193	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Signals, railway track, explosive	1.3G	UN0492		EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	Signals, railway track, explosive	1.4G	UN0493		EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Signals, ship distress, water-activated, see Contrivances, water-activated, etc.</i>								
	Signals, smoke	1.4G	UN0197	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Signals, smoke	1.2G	UN0313	II	EXPLOSIVE 1.2G		None	62	Not Accepted by FedEx Ground
	Signals, smoke	1.3G	UN0487	II	EXPLOSIVE 1.3G		None	62	Not Accepted by FedEx Ground
	Signals, smoke	1.1G	UN0196	II	EXPLOSIVE 1.1G		None	62	Not Accepted by FedEx Ground
	Silane, compressed	2.1	UN2203		FLAMMABLE GAS		None	302	
	<i>Silicofluoric acid, see Fluorosilicic acid</i>								
	<i>Silicon chloride, see Silicon tetrachloride</i>								
	Silicon powder, amorphous	4.1	UN1346	III	FLAMMABLE SOLID		None	213	
	Silicon tetrachloride	8	UN1818	II	CORROSIVE		154	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Silicon tetrafluoride, compressed</b>	2.3	UN1859		POISON GAS, CORROSIVE	2	None	302	<b>Not Accepted by FedEx Ground</b>
	<i>Silver acetylde (dry)</i>	Forbid- den							
	<b>Silver arsenite</b>	6.1	UN1683	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Silver azide (dry)</i>	Forbid- den							
	<i>Silver chlorite (dry)</i>	Forbid- den							
	<b>Silver cyanide</b>	6.1	UN1684	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<i>Silver fulminate (dry)</i>	Forbid- den							
	<b>Silver nitrate</b>	5.1	UN1493	II	OXIDIZER**		152	212	Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<i>Silver oxalate (dry)</i>	Forbid- den							
	<i>Silver picrate (dry)</i>	Forbid- den							
	<b>Silver picrate, wetted with not less than 30 percent water, by mass</b>	4.1	UN1347	I	FLAMMABLE SOLID	23	None	211	
	<b>Sludge, acid</b>	8	UN1906	II	CORROSIVE	N34	None	202	
D	<b>Smokeless powder for small arms (100 pounds or less)</b>	4.1	NA3178	I	FLAMMABLE SOLID**	16	None	171	FedEx Ground cannot transport more than 100 lb. (45.4kg) per motor vehicle
	<b>Soda lime with more than 4 percent sodium hydroxide</b>	8	UN1907	III	CORROSIVE		154	213	
	<b>Sodium</b>	4.3	UN1428	I	DANGEROUS WHEN WET**	N34	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.45kg) per package- see RQ Table
	<b>Sodium aluminate, solid</b>	8	UN2812	III	CORROSIVE		154	213	
	<b>Sodium aluminate, solution</b>	8	UN1819	II	CORROSIVE		154	202	
	<b>Sodium aluminate, solution</b>	8	UN1819	III	CORROSIVE		154	203	
	<b>Sodium aluminum hydride</b>	4.3	UN2835	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium ammonium vanadate</b>	6.1	UN2863	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium arsanilate</b>	6.1	UN2473	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium arsenate</b>	6.1	UN1685	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Sodium arsenite, aqueous solutions</b>	6.1	UN1686	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Sodium arsenite, aqueous solutions</b>	6.1	UN1686	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Sodium arsenite, solid</b>	6.1	UN2027	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 1 lb. (0.454kg) per package- see RQ Table
	<b>Sodium azide</b>	6.1	UN1687	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Sodium bifluoride, see Sodium hydrogendifluoride</i>								
	<i>Sodium bisulfite, solution, see Bisulfites, aqueous solutions, n.o.s.</i>								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Sodium borohydride</b>	4.3	UN1426	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium borohydride and sodium hydroxide solution, with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass</b>	8	UN3320	II	CORROSIVE	N34	154	202	
	<b>Sodium borohydride and sodium hydroxide solution, with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass</b>	8	UN3320	III	CORROSIVE	N34	154	203	
	<b>Sodium bromate</b>	5.1	UN1494	II	OXIDIZER		152	212	
	<b>Sodium cacodylate</b>	6.1	UN1688	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium carbonate peroxyhydrate</b>	5.1	UN3378	II	OXIDIZER		152	212	
	<b>Sodium chlorate</b>	5.1	UN1495	II	OXIDIZER	N34	152	212	
	<b>Sodium chlorate, aqueous solution</b>	5.1	UN2428	II	OXIDIZER		152	202	
	<b>Sodium chlorate, aqueous solution</b>	5.1	UN2428	III	OXIDIZER		152	203	
	<i>Sodium chlorate mixed with dinitrotoluene, see Explosive blasting, type C</i>								
	<b>Sodium chlorite</b>	5.1	UN1496	II	OXIDIZER	N34	None	212	
	<b>Sodium chloroacetate</b>	6.1	UN2659	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium cuprocyanide, solid</b>	6.1	UN2316	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium cuprocyanide, solution</b>	6.1	UN2317	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium cyanide, solid</b>	6.1	UN1689	I	POISON**	N74, N75	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium cyanide, solution</b>	6.1	UN3414	II	POISON**	N74, N75	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium cyanide, solution</b>	6.1	UN3414	III	POISON**	N74, N75	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Sodium dichloroisocyanurate or Sodium dichloro-s-triazinetrione, see Dichloroisocyanuric acid etc</i>								
	<b>Sodium dinitro-o-cresolate, dry or wetted with less than 15 percent water, by mass</b>	1.3C	UN0234	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	<b>Sodium dinitro-o-cresolate, dry or wetted with not less than 10 percent water, by mass</b>	4.1	UN3369	I	FLAMMBABLE SOLID	N41, N84	None	211	
	<b>Sodium dinitro-o-cresolate, wetted with not less than 15 percent water, by mass</b>	4.1	UN1348	I	FLAMMABLE SOLID, POISON**	23, N41	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium dithionite or Sodium hydrosulfite</b>	4.2	UN1384	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	<b>Sodium fluoride, solid</b>	6.1	UN1690	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium fluoride, solution</b>	6.1	UN3415	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium fluoroacetate</b>	6.1	UN2629	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium fluorosilicate</b>	6.1	UN2674	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Sodium hydrate, see Sodium hydroxide, solid</i>								
	<b>Sodium hydride</b>	4.3	UN1427	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Sodium hydrogendifluoride</b>	8	UN2439	II	CORROSIVE	N3,N34	154	212	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym- bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Sodium hydrosulfide, with less than 25 percent water of crystallization	4.2	UN2318	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	Sodium hydrosulfide with not less than 25 percent water of crystallization	8	UN2949	II	CORROSIVE		154	212	
	Sodium hydrosulfite, see Sodium dithionite								
	Sodium hydroxide, solid	8	UN1823	II	CORROSIVE		154	212	
	Sodium hydroxide solution	8	UN1824	II	CORROSIVE	N34	154	202	
	Sodium hydroxide solution	8	UN1824	III	CORROSIVE	N34	154	203	
	Sodium hypochlorite, solution, see Hypochlorite solutions etc.								
	Sodium metal, liquid alloy, see Alkali metal alloys, liquid, n.o.s.								
	Sodium methylate	4.2 (8)	UN1431	II	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE		None	212	Not Accepted by FedEx Ground
	Sodium methylate solutions in alcohol	3 (8)	UN1289	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	Sodium methylate solutions in alcohol	3 (8)	UN1289	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	Sodium monoxide	8	UN1825	II	CORROSIVE		154	212	
	Sodium nitrate	5.1	UN1498	III	OXIDIZER		152	213	
	Sodium nitrate and potassium nitrate mixtures	5.1	UN1499	III	OXIDIZER		152	213	
	Sodium nitrite	5.1 (6.1)	UN1500	III	OXIDIZER, POISON**		152	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Sodium pentachlorophenate	6.1	UN2567	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Sodium perborate monohydrate	5.1	UN3377	III	OXIDIZER		152	213	
	Sodium perchlorate	5.1	UN1502	II	OXIDIZER		152	212	
	Sodium permanganate	5.1	UN1503	II	OXIDIZER		152	212	
	Sodium peroxide	5.1	UN1504	I	OXIDIZER	N34	None	211	
	Sodium peroxoborate, anhydrous	5.1	UN3247	II	OXIDIZER		152	212	
	Sodium persulfate	5.1	UN1505	III	OXIDIZER		152	213	
	Sodium phosphide	4.3 (6.1)	UN1432	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Sodium picramate, dry or wetted with less than 20 percent water, by mass	1.3C	UN0235	II	EXPLOSIVE 1.3C		None	62	Not Accepted by FedEx Ground
	Sodium picramate, wetted with not less than 20 percent water, by mass	4.1	UN1349	I	FLAMMABLE SOLID	23, N41	None	211	
	Sodium picryl peroxide	Forbid- den							
	Sodium potassium alloys, see Potassium sodium alloys								
	Sodium selenate, see Selenates or Selenites								
	Sodium sulfide, anhydrous or Sodium sulfide with less than 30 percent water of crystallization	4.2	UN1385	II	SPONTANEOUSLY COMBUSTIBLE	N34	None	212	Not Accepted by FedEx Ground
	Sodium sulfide, hydrated with not less than 30 percent water	8	UN1849	II	CORROSIVE		154	212	
	Sodium superoxide	5.1	UN2547	I	OXIDIZER	N34	None	211	
	Sodium tetranitride	Forbid- den							
G	Solids containing corrosive liquid, n.o.s.	8	UN3244	II	CORROSIVE	49	154	212	
G	Solids containing flammable liquid, n.o.s.	4.1	UN3175	II	FLAMMABLE SOLID	47	151	212	
G	Solids containing toxic liquid, n.o.s.	6.1	UN3243	II	POISON**	48	153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Sounding devices, explosive	1.2F	UN0204	II	EXPLOSIVE 1.2F		None	62	Not Accepted by FedEx Ground
	Sounding devices, explosive	1.1F	UN0296	II	EXPLOSIVE 1.1F		None	62	Not Accepted by FedEx Ground
	Sounding devices, explosive	1.1D	UN0374	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Sounding devices, explosive</b>	1.2D	UN0375	II	EXPLOSIVE 1.2D		None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Spirits of salt, see Hydrochloric acid</i>								
	<i>Squibs, see Igniters etc.</i>								
	<b>Stannic chloride, anhydrous</b>	8	UN1827	II	CORROSIVE		154	202	
	<b>Stannic chloride, pentahydrate</b>	8	UN2440	III	CORROSIVE		154	213	
	<b>Stannic phosphide</b>	4.3 (6.1)	UN1433	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Steel swarf, see Ferrous metal borings, etc.</i>								
	<b>Stibine</b>	2.3 (2.1)	UN2676		POISON GAS, FLAMMABLE GAS	1	None	304	<b>Not Accepted by FedEx Ground</b>
	<i>Storage batteries, wet, see Batteries, wet etc.</i>								
	<b>Strontium arsenite</b>	6.1	UN1691	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Strontium chlorate</b>	5.1	UN1506	II	OXIDIZER	N34	152	212	
	<b>Strontium nitrate</b>	5.1	UN1507	III	OXIDIZER		152	213	
	<b>Strontium perchlorate</b>	5.1	UN1508	II	OXIDIZER		152	212	
	<b>Strontium peroxide</b>	5.1	UN1509	II	OXIDIZER		152	212	
	<b>Strontium phosphide</b>	4.3 (6.1)	UN2013	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Strychnine or Strychnine salts</b>	6.1	UN1692	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.45kg) per package- see RQ Table
	<i>Styphnic acid, see Trinitroresorcinol, etc.</i>								
	<b>Styrene monomer, stabilized</b>	3	UN2055	III	FLAMMABLE LIQUID		150	203	
G	<b>Substances, explosive, n.o.s.</b>	1.1L	UN0357	II	EXPLOSIVE 1.1L	101	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.2L	UN0358	II	EXPLOSIVE 1.2L	101	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.3L	UN0359	II	EXPLOSIVE 1.3L	101	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.1A	UN0473	II	EXPLOSIVE 1.1A	101, 111	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.1C	UN0474	II	EXPLOSIVE 1.1C	101	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.1D	UN0475	II	EXPLOSIVE 1.1D	101	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.1G	UN0476	II	EXPLOSIVE 1.1G	101	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.3C	UN0477	II	EXPLOSIVE 1.3C	101	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.3G	UN0478	II	EXPLOSIVE 1.3G	101	None	62	<b>Not Accepted by FedEx Ground</b>
G	<b>Substances, explosive, n.o.s.</b>	1.4C	UN0479	II	EXPLOSIVE 1.4C	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<b>Substances, explosive, n.o.s.</b>	1.4D	UN0480	II	EXPLOSIVE 1.4D	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<b>Substances, explosive, n.o.s.</b>	1.4S	UN0481	II	EXPLOSIVE 1.4S	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<b>Substances, explosive, n.o.s.</b>	1.4G	UN0485	II	EXPLOSIVE 1.4G	101	None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
G	<b>Substances, explosive, very insensitive, n.o.s. or Substances, EVI n.o.s.</b>	1.5D	UN0482	II	EXPLOSIVE 1.5D	101	None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Substituted nitrophenol pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN2780	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Substituted nitrophenol pesticides, liquid, flammable, toxic, <i>flashpoint less than 23 degrees C</i>	3	UN2780	II	FLAMMABLE LIQUID, POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, liquid, toxic	6.1	UN3014	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, liquid, toxic	6.1	UN3014	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, liquid, toxic	6.1	UN3014	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, liquid, toxic, flammable <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3013	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, liquid, toxic, flammable <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3013	II	POISON, FLAMMABLE LIQUID**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, liquid, toxic, flammable <i>flashpoint not less than 23 degrees C</i>	6.1 (3)	UN3013	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, solid, toxic	6.1	UN2779	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, solid, toxic	6.1	UN2779	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Substituted nitrophenol pesticides, solid, toxic	6.1	UN2779	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Sucrose octanitrate (dry)</i>	Forbid- den							
	Sulfamic acid	8	UN2967	III	CORROSIVE		154	213	
I	Sulfur	4.1	UN1350	III	FLAMMABLE SOLID	30	None	None	Not Accepted by FedEx Ground
D	Sulfur	9	NA1350	III	CLASS 9	30	None	None	May not be regulated via highway
	<i>Sulfur and chlorate, loose mixtures of</i>	Forbid- den							
	Sulfur chlorides	8	UN1828	I	CORROSIVE	5, N34	None	201	
	<i>Sulfur dichloride, see Sulfur chlorides</i>								
	Sulfur dioxide	2.3 (8)	UN1079		POISON GAS, CORROSIVE	3	None	304	Not Accepted by FedEx Ground
	<i>Sulfur dioxide solution, see Sulfurous acid</i>								
	<i>Sulfuretted hydrogen, see Hydrogen sulfide</i>								
	Sulfur hexafluoride	2.2	UN1080		NONFLAMMABLE GAS		306	304	
+	Sulfuric acid, fuming with 30 percent or more free sulfur trioxide	8	UN1831	I	CORROSIVE, POISON	2,N34	None	227	Not Accepted by FedEx Ground
	Sulfuric acid, fuming with less than 30 percent free sulfur trioxide	8	UN1831	I	CORROSIVE	N34	None	201	
	Sulfuric acid, spent	8	UN1832	II	CORROSIVE	N34	None	202	
	Sulfuric acid with more than 51 percent acid	8	UN1830	II	CORROSIVE	N34	154	202	
	Sulfuric acid with not more than 51 percent acid	8	UN2796	II	CORROSIVE	N6, N34	154	202	
	Sulfuric and hydrofluoric acid mixtures <i>see Hydrofluoric and sulfuric acid mixtures</i>								
	<i>Sulfuric anhydride, see Sulfur trioxide, inhibited</i>								
I	Sulfur, molten	4.1	UN2448	III	FLAMMABLE SOLID	30	None	213	Not Accepted by FedEx Ground
D	Sulfur, molten	9	NA2448	III	CLASS 9	30	None	213	Not Accepted by FedEx Ground
	Sulfurous acid	8	UN1833	II	CORROSIVE		154	202	
	Sulfur tetrafluoride	2.3 (8)	UN2418		POISON GAS, CORROSIVE	1	None	302	Not Accepted by FedEx Ground
+	Sulfur trioxide, stabilized	8 (6.1)	UN1829	I	CORROSIVE, POISON	2, N34	None	227	Not Accepted by FedEx Ground
+	Sulfuryl chloride	8 (6.1)	UN1834	I	CORROSIVE, POISON	1, N34	None	226	Not Accepted by FedEx Ground
	Sulfuryl fluoride	2.3	UN2191		POISON GAS	4	None	304	Not Accepted by FedEx Ground
	Tars, liquid including road asphalt and oils, bitumen and cut backs	3	UN1999	II	FLAMMABLE LIQUID		150	202	
	Tars, liquid including road asphalt and oils, bitumen and cut backs	3	UN1999	III	FLAMMABLE LIQUID		150	203	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Tear gas candles	6.1 (4.1)	UN1700	II	POISON, FLAMMABLE SOLID**		None	340	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tear gas cartridges, see Ammunition, tear-producing, etc.								
D	Tear gas devices with more than 2 percent tear gas substances, by mass	6.1	NA1693	I	POISON**		None	340	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	Tear gas devices with more than 2 percent tear gas substances, by mass	6.1	NA1693	II	POISON**		None	340	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tear gas devices, with not more than 2 percent tear gas substances, by mass, see Aerosols, etc.								
	Tear gas grenades, see Tear gas candles								
G	Tear gas substances, liquid, n.o.s.	6.1	UN1693	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Tear gas substances, liquid, n.o.s.	6.1	UN1693	II	POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Tear gas substances, solid, n.o.s.	6.1	UN3448	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Tear gas substances, solid, n.o.s.	6.1	UN3448	II	POISON**		None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tellurium compound, n.o.s.	6.1	UN3284	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tellurium compound, n.o.s.	6.1	UN3284	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tellurium compound, n.o.s.	6.1	UN3284	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tellurium hexafluoride	2.3 (8)	UN2195		POISON GAS, CORROSIVE	1	None	302	Not Accepted by FedEx Ground
	Terpene hydrocarbons, n.o.s.	3	UN2319	III	FLAMMABLE LIQUID		150	203	
	Terpinolene	3	UN2541	III	FLAMMABLE LIQUID		150	203	
	Tetraazido benzene quinone	Forbid-den							
	Tetrabromoethane	6.1	UN2504	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	1,1,2,2-Tetrachlorethane	6.1	UN1702	II	POISON**	N36	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tetrachloroethylene	6.1	UN1897	III	POISON**	N36	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tetraethylammonium perchlorate (dry)	Forbid-den							
	Tetraethyl dithiopyrophosphate	6.1	UN1704	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tetraethylenepentamine	8	UN2320	III	CORROSIVE		154	203	
	Tetraethyl silicate	3	UN1292	III	FLAMMABLE LIQUID		150	203	
	1,1,1,2-Tetrafluoroethane or Refrigerant gas R 134a	2.2	UN3159		NONFLAMMABLE GAS		306	304	
	Tetrafluoroethylene, stabilized	2.1	UN1081		FLAMMABLE GAS		306	304	
	Tetrafluoromethane, compressed or Refrigerant gas R 14	2.2	UN1982		NONFLAMMABLE GAS		None	302	
	1,2,3,6-Tetrahydrobenzaldehyde	3	UN2498	III	FLAMMABLE LIQUID		150	203	
	Tetrahydrofuran	3	UN2056	II	FLAMMABLE LIQUID		None	202	
	Tetrahydrofurfurylamine	3	UN2943	III	FLAMMABLE LIQUID		150	203	
	Tetrahydrophthalic anhydrides with more than 0.05 percent of maleic anhydride	8	UN2698	III	CORROSIVE		154	213	
	1,2,3,6-Tetrahydropyridine	3	UN2410	II	FLAMMABLE LIQUID		150	202	
	Tetrahydrothiophene	3	UN2412	II	FLAMMABLE LIQUID		150	202	
	Tetramethylammonium hydroxide, solid	8	UN3423	II	CORROSIVE		154	213	
	Tetramethylammonium hydroxide solution	8	UN1835	II	CORROSIVE		154	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Tetramethylammonium hydroxide solution</b>	8	UN1835	III	CORROSIVE		154	203	
	<i>Tetramethylene diperoxide dicarbamide</i>	Forbid- den							
	<b>Tetramethylsilane</b>	3	UN2749	I	FLAMMABLE LIQUID		None	201	
	<b>Tetranitroaniline</b>	1.1D	UN0207	II	EXPLOSIVE 1.1D		None	62	<b>Not Accepted by FedEx Ground</b>
	<i>Tetranitro diglycerin</i>	Forbid- den							
+	<b>Tetranitromethane</b>	5.1 (6.1)	UN1510	I	OXIDIZER, POISON	2	None	227	<b>Not Accepted by FedEx Ground</b>
	<i>2,3,4,6-Tetranitrophenol</i>	Forbid- den							
	<i>2,3,4,6-Tetranitrophenyl methyl nitramine</i>	Forbid- den							
	<i>2,3,4,6-Tetranitrophenylnitramine</i>	Forbid- den							
	<i>Tetranitroresorcinol (dry)</i>	Forbid- den							
	<i>2,3,5,6-Tetranitroso-1,4-dinitrobenzene</i>	Forbid- den							
	<i>2,3,5,6-Tetranitroso nitrobenzene (dry)</i>	Forbid- den							
	<b>Tetrapropylorthotitanate</b>	3	UN2413	III	FLAMMABLE LIQUID		150	203	
	<b>Tetrazene, see Guanyl nitrosaminoguanyltetrazene</b>								
	<i>Tetrazine (dry)</i>	Forbid- den							
	<b>Tetrazol-1-acetic acid</b>	1.4C	UN0407	II	EXPLOSIVE 1.4C		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<b>1H-Tetrazole</b>	1.1D	UN0504		EXPLOSIVE 1.1D		None	62	
	<i>Tetrazolyl azide (dry)</i>	Forbid- den							
	<b>Tetryl, see Trinitrophenylmethylnitramine</b>								
A I W	<b>Textile waste, wet</b>	4.2	UN1857	III	SPONTANEOUSLY COMBUSTIBLE		151	213	<b>Not Accepted by FedEx Ground</b>
	<b>Thallium chlorate</b>	5.1 (6.1)	UN2573	II	OXIDIZER, POISON**		152	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thallium compounds, n.o.s.</b>	6.1	UN1707	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thallium nitrate</b>	6.1 (5.1)	UN2727	II	POISON, OXIDIZER**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thallium sulfate, solid</b>	6.1	NA1707	II	POISON**		None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>4-Thiapentanal</b>	6.1	UN2785	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thioacetic acid</b>	3	UN2436	II	FLAMMABLE LIQUID		150	202	
	<b>Thiocarbamate pesticide, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN2772	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thiocarbamate pesticide, liquid, flammable, toxic, flashpoint less than 23 degrees C</b>	3 (6.1)	UN2772	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thiocarbamate pesticide, liquid, toxic</b>	6.1	UN3006	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thiocarbamate pesticide, liquid, toxic</b>	6.1	UN3006	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thiocarbamate pesticide, liquid, toxic</b>	6.1	UN3006	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thiocarbamate pesticides, liquid, flammable, toxic flashpoint not less than 23 degrees C</b>	6.1 (3)	UN3305	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thiocarbamate pesticides, liquid, flammable, toxic flashpoint not less than 23 degrees C</b>	6.1 (3)	UN3305	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Thiocarbamate pesticides, liquid, flammable, toxic flashpoint not less than 23 degrees C</b>	6.1 (3)	UN3305	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Thiocarbamate pesticides, solid, toxic	6.1	UN2771	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Thiocarbamate pesticides, solid, toxic	6.1	UN2771	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Thiocarbamate pesticides, solid, toxic	6.1	UN2771	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Thiocarbonylchloride, see Thiophosgene</i>								
	Thioglycol	6.1	UN2966	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Thioglycolic acid	8	UN1940	II	CORROSIVE	N34	154	202	
	Thiolactic acid	6.1	UN2936	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Thionyl chloride	8	UN1836	I	CORROSIVE	N34	None	201	
	Thiophene	3	UN2414	II	FLAMMABLE LIQUID		150	202	
+	Thiophosgene	6.1	UN2474	II	POISON	2,N33,N34	None	227	Not Accepted by FedEx Ground
	Thiophosphoryl chloride	8	UN1837	II	CORROSIVE	N34	None	202	
	Thiourea dioxide	4.2	UN3341	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	Thiourea dioxide	4.2	UN3341	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	<i>Tin chloride, fuming, see Stannic chloride, anhydrous</i>								
	Tinctures, medicinal	3	UN1293	II	FLAMMABLE LIQUID		150	202	
	Tinctures, medicinal	3	UN1293	III	FLAMMABLE LIQUID		150	203	
	<i>Tinning flux, see Zinc chloride</i>								
	<i>Tin perchloride or Tin tetrachloride, see Stannic chloride, anhydrous</i>								
	Titanium disulphide	4.2	UN3174	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Titanium hydride	4.1	UN1871	II	FLAMMABLE SOLID	N34	None	212	
	Titanium powder, dry	4.2	UN2546	I	SPONTANEOUSLY COMBUSTIBLE		None	211	Not Accepted by FedEx Ground
	Titanium powder, dry	4.2	UN2546	II	SPONTANEOUSLY COMBUSTIBLE	N5,N34	None	212	Not Accepted by FedEx Ground
	Titanium powder, dry	4.2	UN2546	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Titanium powder, wetted with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns	4.1	UN1352	II	FLAMMABLE SOLID	N34	None	212	
	Titanium sponge granules or Titanium sponge powders	4.1	UN2878	III	FLAMMABLE SOLID		None	213	
+	Titanium tetrachloride	8 (6.1)	UN1838	II	CORROSIVE, POISON	2	None	227	Not Accepted by FedEx Ground
	Titanium trichloride mixtures	8	UN2869	II	CORROSIVE	N34	154	212	
	Titanium trichloride mixtures	8	UN2869	III	CORROSIVE	N34	154	213	
	Titanium trichloride, pyrophoric or Titanium trichloride mixtures, pyrophoric	4.2 (8)	UN2441	I	SPONTANEOUSLY COMBUSTIBLE, CORROSIVE	N34	None	181	Not Accepted by FedEx Ground
	<i>TNT mixed with aluminum, see Tritonal</i>								
	<i>TNT, see Trinitrotoluene, etc.</i>								
	Toluene	3	UN1294	II	FLAMMABLE LIQUID		150	202	
+	Toluene diisocyanate	6.1	UN2078	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Toluene sulfonic acid, see Alkyl, or Aryl sulfonic acid etc.</i>								
+	Toluidines, liquid	6.1	UN1708	II	POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Toluidines, solid	6.1	UN3451	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>2,4-Toluylenediamine, solid or 2,4-Toluenediamine, solid</b>	6.1	UN1709	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>2,4-Toluylenediamine, solid or 2,4-Toluenediamine, solid</b>	6.1	UN3418	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Torpedoes, liquid fueled with inert head</b>	1.3J	UN0450	II	EXPLOSIVE 1.3J		None	62	Not Accepted by FedEx Ground
	<b>Torpedoes, liquid fueled, with or without bursting charge</b>	1.1J	UN0449	II	EXPLOSIVE 1.1J		None	62	Not Accepted by FedEx Ground
	<b>Torpedoes with bursting charge</b>	1.1E	UN0329	II	EXPLOSIVE 1.1E		None	62	Not Accepted by FedEx Ground
	<b>Torpedoes with bursting charge</b>	1.1F	UN0330	II	EXPLOSIVE 1.1F		None	62	Not Accepted by FedEx Ground
	<b>Torpedoes with bursting charge</b>	1.1D	UN0451	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, corrosive, n.o.s. with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration great than or equal to 10 LC50</b>	6.1 (8)	UN3390	I	POISON, CORROSIVE	2	None	227	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, corrosive, n.o.s. with an inhalation toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration great than or equal to 500 LC50</b>	6.1 (8)	UN3389	I	POISON, CORROSIVE	1	None	226	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, flammable, n.o.s. with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration great than or equal to 10 LC50</b>	6.1 (3)	UN3384	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, flammable, n.o.s. with an inhalation toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration great than or equal to 500 LC50</b>	6.1 (3)	UN3383	I	POISON, FLAMMABLE LIQUID	1	None	226	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, n.o.s. with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration great than or equal to 10 LC50</b>	6.1	UN3382	I	POISON	2	None	227	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, n.o.s. with an inhalation toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration great than or equal to 500 LC50</b>	6.1	UN3381	I	POISON	1	None	226	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, oxidizing, n.o.s. with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration great than or equal to 10 LC50</b>	6.1 (5.1)	UN3388	I	POISON, OXIDIZER	2	None	227	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, oxidizing, n.o.s. with an inhalation toxicity lower than or equal to 200ml/m3 and saturated vapor concentration great than or equal to 500 LC50</b>	6.1 (5.1)	UN3387	I	POISON, OXIDIZER	1	None	226	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, water-reactive, n.o.s. with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration great than or equal to 10 LC50</b>	6.1 (4.3)	UN3386	I	POISON, DANGEROUS WHEN WET	2	None	227	Not Accepted by FedEx Ground
G	<b>Toxic by inhalation liquid, water-reactive, n.o.s. with an inhalation toxicity lower than or equal to 200 ml/m3 and saturated vapor concentration great than or equal to 500 LC50</b>	6.1 (4.3)	UN3385	I	POISON, DANGEROUS WHEN WET				
G	<b>Toxic liquid, corrosive, inorganic, n.o.s.</b>	6.1 (8)	UN3289	I	POISON, CORROSIVE**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Toxic liquid, corrosive, inorganic, n.o.s.</b>	6.1 (8)	UN3289	II	POISON, CORROSIVE**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Toxic liquid, inorganic, n.o.s.</b>	6.1	UN3287	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Toxic liquid, inorganic, n.o.s.</b>	6.1	UN3287	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	<b>Toxic liquid, inorganic, n.o.s.</b>	6.1	UN3287	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)		FedEx Ground Restrictions	
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions		NonBulk
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Toxic liquids, corrosive, organic, n.o.s.	6.1 (8)	UN2927	I	POISON, CORROSIVE**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic liquids, corrosive, organic, n.o.s.	6.1 (8)	UN2927	II	POISON, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic liquids, flammable, organic, n.o.s.	6.1 (3)	UN2929	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic liquids, flammable, organic, n.o.s.	6.1 (3)	UN2929	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic, liquids, organic, n.o.s.	6.1	UN2810	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic, liquids, organic, n.o.s.	6.1	UN2810	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic, liquids, organic, n.o.s.	6.1	UN2810	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic liquids, oxidizing, n.o.s.	6.1 (5.1)	UN3122	I	POISON, OXIDIZER**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic liquids, oxidizing, n.o.s.	6.1 (5.1)	UN3122	II	POISON, OXIDIZER**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic liquids, water-reactive, n.o.s.	6.1 (4.3)	UN3123	I	POISON, DANGEROUS WHEN WET**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic liquids, water-reactive, n.o.s.	6.1 (4.3)	UN3123	II	POISON, DANGEROUS WHEN WET**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solid, corrosive, inorganic, n.o.s.	6.1 (8)	UN3290	I	POISON, CORROSIVE**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solid, corrosive, inorganic, n.o.s.	6.1 (8)	UN3290	II	POISON, CORROSIVE**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solid, inorganic, n.o.s.	6.1	UN3288	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solid, inorganic, n.o.s.	6.1	UN3288	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solid, inorganic, n.o.s.	6.1	UN3288	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, corrosive, organic, n.o.s.	6.1 (8)	UN2928	I	POISON, CORROSIVE**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, corrosive, organic, n.o.s.	6.1 (8)	UN2928	II	POISON, CORROSIVE**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, flammable, organic, n.o.s.	6.1 (4.1)	UN2930	I	POISON, FLAMMABLE SOLID**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, flammable, organic, n.o.s.	6.1 (4.1)	UN2930	II	POISON, FLAMMABLE SOLID**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, organic, n.o.s.	6.1	UN2811	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, organic, n.o.s.	6.1	UN2811	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, organic, n.o.s.	6.1	UN2811	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, oxidizing, n.o.s.	6.1 (5.1)	UN3086	I	POISON, OXIDIZER**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, oxidizing, n.o.s.	6.1 (5.1)	UN3086	II	POISON, OXIDIZER**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxic solids, self-heating, n.o.s.	6.1 (4.2)	UN3124	I	POISON, SPONTANEOUSLY COMBUSTIBLE		None	211	Not Accepted by FedEx Ground
G	Toxic solids, self-heating, n.o.s.	6.1 (4.2)	UN3124	II	POISON, SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
G	Toxic solids, water-reactive, n.o.s.	6.1 (4.3)	UN3125	I	POISON, DANGEROUS WHEN WET**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Toxic solids, water-reactive, n.o.s.	6.1 (4.3)	UN3125	II	POISON, DANGEROUS WHEN WET**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxins, extracted from living sources, liquid n.o.s.	6.1	UN3172	I	POISON**	141	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxins, extracted from living sources, liquid n.o.s.	6.1	UN3172	II	POISON**	141	None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxins, extracted from living sources, liquid n.o.s.	6.1	UN3172	III	POISON**	141	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxins,extracted from living sources , solid n.o.s.	6.1	UN3462	I	POISON**	141	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxins,extracted from living sources , solid n.o.s.	6.1	UN3462	II	POISON**	141	None	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Toxins,extracted from living sources , solid n.o.s.	6.1	UN3462	III	POISON**	141	153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
D	Toy Caps	1.4S	NA0337	II	EXPLOSIVE 1.4S		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Tracers for ammunition	1.3G	UN0212	II	EXPLOSIVE 1.3G		None	62	<b>Not Accepted by FedEx Ground</b>
	Tracers for ammunition	1.4G	UN0306	II	EXPLOSIVE 1.4G		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	<i>Tractors, see Vehicles, etc.</i>								
	Triallylamine	3 (8)	UN2610	III	FLAMMABLE LIQUID, CORROSIVE		None	203	
	Triallyl borate	6.1	UN2609	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C	3 (6.1)	UN2764	I	FLAMMABLE LIQUID, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, liquid, flammable, toxic, flashpoint less than 23 degrees C	3 (6.1)	UN2764	II	FLAMMABLE LIQUID, POISON**		150	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, liquid, toxic	6.1	UN2998	I	POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, liquid, toxic	6.1	UN2998	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, liquid, toxic	6.1	UN2998	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN2997	I	POISON, FLAMMABLE LIQUID**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN2997	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, liquid, toxic, flammable, flashpoint not less than 23 degrees C	6.1 (3)	UN2997	III	POISON, FLAMMABLE LIQUID**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, solid, toxic	6.1	UN2763	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, solid, toxic	6.1	UN2763	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triazine pesticides, solid, toxic	6.1	UN2763	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Tri-(b-nitroxyethyl) ammonium nitrate</i>	Forbid- den							
	Tributylamine	6.1	UN2542	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Tributylphosphane	4.2	UN3254	I	SPONTANEOUSLY COMBUSTIBLE		None	211	<b>Not Accepted by FedEx Ground</b>
	Trichloroacetic acid	8	UN1839	II	CORROSIVE	N34	154	212	
	Trichloroacetic acid, solution	8	UN2564	II	CORROSIVE	N34	154	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Trichloroacetic acid, solution	8	UN2564	III	CORROSIVE	N34	154	203	
+	Trichloroacetyl chloride	8 (6.1)	UN2442	II	CORROSIVE, POISON	2, N34	None	227	Not Accepted by FedEx Ground
	Trichlorobenzenes, liquid	6.1	UN2321	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Trichlorobutene	6.1	UN2322	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	1,1,1-Trichloroethane	6.1	UN2831	III	POISON**	N36	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Trichloroethylene	6.1	UN1710	III	POISON**	N36	153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Trichloroisocyanuric acid, dry	5.1	UN2468	II	OXIDIZER		152	212	
	<i>Trichloromethyl perchlorate</i>	Forbid- den							
	Trichlorosilane	4.3 (3,8)	UN1295	I	DANGEROUS WHEN WET, FLAMMABLE LIQUID, CORROSIVE**	N34	None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Trichloro-s-triazinetrione dry, with more than 39 percent available chlorine, see Trichloroisocyanuric acid, dry</i>								
	Tricresyl phosphate with more than 3 percent ortho isomer	6.1	UN2574	II	POISON**	N33, N34	153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Triethylamine	3 (8)	UN1296	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	Triethylenetetramine	8	UN2259	II	CORROSIVE		154	202	
	Triethyl phosphite	3	UN2323	III	FLAMMABLE LIQUID		150	203	
	Trifluoroacetic acid	8	UN2699	I	CORROSIVE	N3, N34	None	201	
	Trifluoroacetyl chloride	2.3 (8)	UN3057		POISON GAS, CORROSIVE	2	None	304	Not Accepted by FedEx Ground
	Trifluorochloroethylene, stabilized	2.3 (2.1)	UN1082		POISON GAS, FLAMMABLE GAS	3	None	304	Not Accepted by FedEx Ground
	1,1,1-Trifluoroethane or Refrigerant gas R 143a	2.1	UN2035		FLAMMABLE GAS		306	304	
	Trifluoromethane or Refrigerant gas R 23	2.2	UN1984		NONFLAMMABLE GAS		306	304	
	Trifluoromethane, refrigerated liquid	2.2	UN3136		NONFLAMMABLE GAS		306	None	
	3-Trifluoromethylaniline	6.1	UN2948	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	2-Trifluoromethylaniline	6.1	UN2942	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Triformoxime trinitrate</i>	Forbid- den							
	Triisobutylene	3	UN2324	III	FLAMMABLE LIQUID		150	203	
	Triisopropyl borate	3	UN2616	II	FLAMMABLE LIQUID		150	202	
	Triisopropyl borate	3	UN2616	III	FLAMMABLE LIQUID		150	203	
D	Trimethoxysilane	6.1 (3)	NA9269	I	POISON, FLAMMABLE LIQUID	2	None	227	Not Accepted by FedEx Ground
	<i>1,3,5-Trimethyl-2,4,6-trinitrobenzene</i>	Forbid- den							
	Trimethylacetyl chloride	6.1 (8,3)	UN2438	I	POISON, CORROSIVE, FLAMMABLE LIQUID	2, N34	None	227	Not Accepted by FedEx Ground
	Trimethylamine, anhydrous	2.1	UN1083		FLAMMABLE GAS		306	304	
	Trimethylamine, aqueous solutions with not more than 50 percent trimethylamine by mass	3 (8)	UN1297	I	FLAMMABLE LIQUID, CORROSIVE		None	201	
	Trimethylamine, aqueous solutions with not more than 50 percent trimethylamine by mass	3 (8)	UN1297	II	FLAMMABLE LIQUID, CORROSIVE		150	202	
	Trimethylamine, aqueous solutions with not more than 50 percent trimethylamine by mass	3 (8)	UN1297	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	1,3,5-Trimethylbenzene	3	UN2325	III	FLAMMABLE LIQUID		150	203	
	Trimethyl borate	3	UN2416	II	FLAMMABLE LIQUID		150	202	
	Trimethylchlorosilane	3 (8)	UN1298	II	FLAMMABLE LIQUID, CORROSIVE	N34	150	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Trimethylcyclohexylamine</b>	8	UN2326	III	CORROSIVE		154	203	
	<i>Trimethylene glycol diperchlorate</i>	Forbid- den							
	<b>Trimethylhexamethylenediamines</b>	8	UN2327	III	CORROSIVE		154	203	
	<b>Trimethylhexamethylene diisocyanate</b>	6.1	UN2328	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Trimethylol nitromethane trinitrate</i>	Forbid- den							
	<b>Trimethyl phosphite</b>	3	UN2329	III	FLAMMABLE LIQUID		150	203	
	<i>2,4,6-Trinitro-1,3,5-triazido benzene (dry)</i>	Forbid- den							
	<i>2,4,6-Trinitro-1,3-diazobenzene</i>	Forbid- den							
	<i>Trinitroacetic acid</i>	Forbid- den							
	<i>Trinitroacetonitrile</i>	Forbid- den							
	<i>Trinitroamine cobalt</i>	Forbid- den							
	<b>Trinitroaniline or Picramide</b>	1.1D	UN0153	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitroanisole</b>	1.1D	UN0213	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrobenzene, dry or wetted with less than 30 percent water, by mass</b>	1.1D	UN0214	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrobenzenesulfonic acid</b>	1.1D	UN0386	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrobenzene, wetted, with not less than 10 percent water, by mass</b>	4.1	UN3367	I	FLAMMABLE SOLID	162, N41, N84	None	211	
	<b>Trinitrobenzene, wetted with not less than 30 percent water, by mass</b>	4.1	UN1354	I	FLAMMABLE SOLID	23, N41	None	211	
	<b>Trinitrobenzoic acid, dry or wetted with less than 30 percent water, by mass</b>	1.1D	UN0215	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrobenzoic acid, wetted with not less than 10 percent water by mass</b>	4.1	UN3368	I	FLAMMABLE SOLID	162	None	211	
	<b>Trinitrobenzoic acid, wetted with not less than 30 percent water, by mass</b>	4.1	UN1355	I	FLAMMABLE SOLID	23, N41	None	211	
	<b>Trinitrochlorobenzene or Picryl chloride</b>	1.1D	UN0155	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrochlorobenzene (picryl chloride), wetted, with not less than 10% water by mass</b>	4.1	UN3365	I	FLAMMABLE SOLID	162, N41, N84	None	211	
	<i>Trinitroethanol</i>	Forbid- den							
	<i>Trinitroethylnitrate</i>	Forbid- den							
	<b>Trinitrofluorenone</b>	1.1D	UN0387	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrofluorenone</b>	1.1D	UN0387	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitro-meta-cresol</b>	1.1D	UN0216	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>Trinitromethane</i>	Forbid- den							
	<i>1,3,5-Trinitronaphthalene</i>	Forbid- den							
	<b>Trinitronaphthalene</b>	1.1D	UN0217	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrophenetole</b>	1.1D	UN0218	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrophenol or Picric acid, dry or wetted with less than 30 percent water, by mass</b>	1.1D	UN0154	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrophenol (picric acid), wetted, with not less than 10% water by mass</b>	4.1	UN3364	I	FLAMMABLE LIQUID	162, N41, N84	None	211	
	<b>Trinitrophenol, wetted with not less than 30 percent water, by mass</b>	4.1	UN1344	I	FLAMMABLE SOLID	23, N41	None	211	
	<i>2,4,6-Trinitrophenyl guanidine (dry)</i>	Forbid- den							
	<b>Trinitrophenylmethylnitramine or Tetryl</b>	1.1D	UN0208	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>2,4,6-Trinitrophenyl nitramine</i>	Forbid- den							
	<i>2,4,6-Trinitrophenyl trimethylol methyl nitramine trinitrate (dry)</i>	Forbid- den							

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions



## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<b>Trinitroresorcinol or Styphnic acid, dry or wetted with less than 20 percent water, or mixture of alcohol and water, by mass</b>	1.1D	UN0219	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitroresorcinol, wetted or Styphnic acid, wetted with not less than 20 percent water, or mixture of alcohol and water by mass</b>	1.1D	UN0394	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<i>2,4,6-Trinitroso-3-methyl nitraminoanisole</i>	Forbid- den							
	<i>Trinitrotetramine cobalt nitrate</i>	Forbid- den							
	<b>Trinitrotoluene and Trinitrobenzene mixtures or TNT and trinitrobenzene mixtures or TNT and hexanitrostilbene mixtures or Trinitrotoluene and hexanitrostilene mixtures</b>	1.1D	UN0388	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrotoluene mixtures containing Trinitrobenzene and Hexanitrostilbene or TNT mixtures containing trinitrobenzene and hexanitrostilbene</b>	1.1D	UN0389	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrotoluene or TNT, dry or wetted with less than 30 percent water, by mass</b>	1.1D	UN0209	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Trinitrotoluene (TNT), wetted, with not less than 10% water by mass</b>	4.1	UN3366	I	FLAMMABLE SOLID	162, N41, N84	None	211	
	<b>Trinitrotoluene, wetted with not less than 30 percent water, by mass</b>	4.1	UN1356	I	FLAMMABLE SOLID	23, N41	None	211	
	<b>Tripropylamine</b>	3 (8)	UN2260	III	FLAMMABLE LIQUID, CORROSIVE		150	203	
	<b>Tripropylene</b>	3	UN2057	II	FLAMMABLE LIQUID		150	202	
	<b>Tripropylene</b>	3	UN2057	III	FLAMMABLE LIQUID		150	203	
	<b>Tris-(1-aziridinyl)phosphine oxide, solution</b>	6.1	UN2501	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Tris-(1-aziridinyl)phosphine oxide, solution</b>	6.1	UN2501	III	POISON**		153	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>Tris, bis-bifluoroamino diethoxy propane (TVOPA)</i>	Forbid- den							
	<b>Tritonal</b>	1.1D	UN0390	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	<b>Tungsten hexafluoride</b>	2.3 (8)	UN2196		POISON GAS, CORROSIVE	2	None	338	Not Accepted by FedEx Ground
	<b>Turpentine</b>	3	UN1299	III	FLAMMABLE LIQUID		150	203	
	<b>Turpentine substitute</b>	3	UN1300	I	FLAMMABLE LIQUID		None	201	
	<b>Turpentine substitute</b>	3	UN1300	II	FLAMMABLE LIQUID		150	202	
	<b>Turpentine substitute</b>	3	UN1300	III	FLAMMABLE LIQUID		150	203	
	<b>Undecane</b>	3	UN2330	III	FLAMMABLE LIQUID		150	203	
	<b>Urea hydrogen peroxide</b>	5.1 (8)	UN1511	III	OXIDIZER, CORROSIVE		152	213	
	<b>Urea nitrate, dry or wetted with less than 20 percent water, by mass</b>	1.1D	UN0220	II	EXPLOSIVE 1.1D	119	None	62	Not Accepted by FedEx Ground
	<b>Urea nitrate, wetted, with not less than 10 percent water by mass</b>	4.1	UN3370	I	FLAMMABLE SOLID	162, N41, N84	None	211	
	<b>Urea nitrate, wetted with not less than 20 percent water, by mass</b>	4.1	UN1357	I	FLAMMABLE SOLID	39, 39, N41	None	211	Not Accepted by FedEx Ground
	<i>Urea peroxide, see Urea hydrogen peroxide</i>								
	<b>Valeraldehyde</b>	3	UN2058	II	FLAMMABLE LIQUID		150	202	
	<i>Valeric acid, see Corrosive liquids, n.o.s.</i>								
	<b>Valeryl chloride</b>	8 (3)	UN2502	II	CORROSIVE, FLAMMABLE LIQUID	N34	154	202	
	<b>Vanadium compound, n.o.s.</b>	6.1	UN3285	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Vanadium compound, n.o.s.</b>	6.1	UN3285	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Vanadium compound, n.o.s.</b>	6.1	UN3285	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<b>Vanadium oxytrichloride</b>	8	UN2443	II	CORROSIVE	N34	154	202	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments					Packaging (§173.***)			FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Vanadium pentoxide, <i>non-fused form</i>	6.1	UN2862	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Vanadium tetrachloride	8	UN2444	I	CORROSIVE	N34	None	201	
	Vanadium trichloride	8	UN2475	III	CORROSIVE		154	213	
	Vanadyl sulfate	6.1	UN2931	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Vehicle, flammable gas powered	9	UN3166		CLASS 9	135, 157	220	220	
	Vehicle, flammable liquid powered	9	UN3166		CLASS 9	135, 157	220	220	
	<i>Very signal cartridge, see Cartridges, signal</i>								
	Vinyl acetate, stabilized	3	UN1301	II	FLAMMABLE LIQUID		150	202	
	Vinyl bromide, stabilized	2.1	UN1085		FLAMMABLE GAS		306	304	
	Vinyl butyrate, stabilized	3	UN2838	II	FLAMMABLE LIQUID		150	202	
	Vinyl chloride, stabilized	2.1	UN1086		FLAMMABLE GAS	21	306	304	Not Accepted by FedEx Ground
	Vinyl chloroacetate	6.1 (3)	UN2589	II	POISON, FLAMMABLE LIQUID**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Vinyl ethyl ether, stabilized	3	UN1302	I	FLAMMABLE LIQUID		None	201	
	Vinyl fluoride, stabilized	2.1	UN1860		FLAMMABLE GAS		306	304	
	Vinylidene chloride, stabilized	3	UN1303	I	FLAMMABLE LIQUID		150	201	
	Vinyl isobutyl ether, stabilized	3	UN1304	II	FLAMMABLE LIQUID		150	202	
	Vinyl methyl ether, stabilized	2.1	UN1087		FLAMMABLE GAS		306	304	
	<i>Vinyl nitrate polymer</i>	Forbid- den							
	Vinylpyridines, stabilized	6.1 (6.1, 8)	UN3073	II	POISON, FLAMMABLE LIQUID, CORROSIVE**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Vinyltoluenes, stabilized	3	UN2618	I	FLAMMABLE LIQUID		150	203	
	Vinyltrichlorosilane, stabilized	3 (8)	UN1305	I	FLAMMABLE LIQUID, CORROSIVE	N34	None	201	
	Warheads, rocket with burster or expelling charge	1.4D	UN0370	II	EXPLOSIVE 1.4D		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Warheads, rocket with burster or expelling charge	1.4F	UN0371	II	EXPLOSIVE 1.4F		None	62	Packages may require an EX number marked on the shipping paper. (see 49CFR 173.56 and 49CFR 172.320)
	Warheads, rocket with bursting charge	1.1D	UN0286	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
	Warheads, rocket with bursting charge	1.2D	UN0287	II	EXPLOSIVE 1.2D		None	62	Not Accepted by FedEx Ground
	Warheads, rocket with bursting charge	1.1F	UN0369	II	EXPLOSIVE 1.1F		None	62	Not Accepted by FedEx Ground
	Warheads, torpedo with bursting charge	1.1D	UN0221	II	EXPLOSIVE 1.1D		None	62	Not Accepted by FedEx Ground
G	Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	I	DANGEROUS WHEN WET, CORROSIVE**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive liquid, corrosive, n.o.s.	4.3 (8)	UN3129	II	DANGEROUS WHEN WET, CORROSIVE**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive liquid, corrosive, n.o.s.	4.3 (8)	UN3129	III	DANGEROUS WHEN WET, CORROSIVE**		None	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive liquid, n.o.s.	4.3	UN3148	I	DANGEROUS WHEN WET**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive liquid, n.o.s.	4.3	UN3148	II	DANGEROUS WHEN WET**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive liquid, n.o.s.	4.3	UN3148	III	DANGEROUS WHEN WET**		None	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive liquid, toxic, n.o.s.	4.3 (6.1)	UN3130	I	DANGEROUS WHEN WET, POISON**		None	201	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive liquid, toxic, n.o.s.	4.3 (6.1)	UN3130	II	DANGEROUS WHEN WET, POISON**		None	202	Accepted only when packaged under applicable special permit or 49CFR 173.13

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
G	Water-reactive liquid, toxic, n.o.s.	4.3 (6.1)	UN3130	III	DANGEROUS WHEN WET, POISON**		None	203	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive solid, corrosive, n.o.s.	4.3	UN3131	I	DANGEROUS WHEN WET, CORROSIVE**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive solid, corrosive, n.o.s.	4.3	UN3131	II	DANGEROUS WHEN WET, CORROSIVE**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Water-reactive solid, corrosive, n.o.s.	4.3	UN3131	III	DANGEROUS WHEN WET, CORROSIVE**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Water-reactive solid, flammable, n.o.s.	4.3	UN3132	I	DANGEROUS WHEN WET, FLAMMABLE SOLID**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive solid, flammable, n.o.s.	4.3	UN3132	II	DANGEROUS WHEN WET, FLAMMABLE SOLID**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Water-reactive solid, flammable, n.o.s.	4.3	UN3132	III	DANGEROUS WHEN WET, FLAMMABLE SOLID**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Water-reactive solid, n.o.s.	4.3	UN2813	I	DANGEROUS WHEN WET**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive solid, n.o.s.	4.3	UN2813	II	DANGEROUS WHEN WET**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Water-reactive solid, n.o.s.	4.3	UN2813	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Water-reactive solid, oxidizing, n.o.s.	4.3 (5.1)	UN3133	II	DANGEROUS WHEN WET, OXIDIZER		None	214	Not Accepted by FedEx Ground
G	Water-reactive solid, oxidizing, n.o.s.	4.3 (5.1)	UN3133	III	DANGEROUS WHEN WET, OXIDIZER		None	214	Not Accepted by FedEx Ground
G	Water-reactive solid, self-heating, n.o.s.	4.3 (4.2)	UN3135	I	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE	N40	None	211	Not Accepted by FedEx Ground
G	Water-reactive solid, self-heating, n.o.s.	4.3 (4.2)	UN3135	II	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
G	Water-reactive solid, self-heating, n.o.s.	4.3 (4.2)	UN3135	III	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
G	Water-reactive solid, toxic, n.o.s.	4.3 (6.1)	UN3134	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
G	Water-reactive solid, toxic, n.o.s.	4.3 (6.1)	UN3134	II	DANGEROUS WHEN WET, POISON**		151	212	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
G	Water-reactive solid, toxic, n.o.s.	4.3 (6.1)	UN3134	III	DANGEROUS WHEN WET, POISON**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13
	<i>Wheel chair, electric see Battery powered vehicle or Battery Powered equipment.</i>								
	<i>White acid, see Hydrofluoric acid mixtures</i>								
I	White asbestos ( <i>chrysotile, actinolite, anthophyllite, tremolite</i> )	9	UN2590	III	CLASS 9		155	216	May not be regulated via highway
	Wood preservatives, liquid	3	UN1306	II	FLAMMABLE LIQUID		150	202	
	Wood preservatives, liquid	3	UN1306	III	FLAMMABLE LIQUID		150	203	
A I W	Wool waste, wet	4.2	UN1387	III	SPONTANEOUSLY COMBUSTIBLE		151	213	
	Xanthates	4.2	UN3342	II	SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	Xanthates	4.2	UN3342	III	SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Xenon	2.2	UN2036		NONFLAMMABLE GAS		306	302	
	Xenon, refrigerated liquid ( <i>cryogenic liquids</i> )	2.2	UN2591		NONFLAMMABLE GAS		320	None	Accepted only when packaged under exception 49CFR 173.320

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

Sym-bols	D.O.T. Basic Description for Hazardous Material Shipments				Label codes	Special provisions	Packaging (§173.***)		FedEx Ground Restrictions
	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG			Exceptions	NonBulk	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	Xylenes	3	UN1307	II	FLAMMABLE LIQUID		150	202	
	Xylenes	3	UN1307	III	FLAMMABLE LIQUID		150	203	
	Xylenols, liquid	6.1	UN3430	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Xylenols, solid	6.1	UN2261	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Xylidines, liquid	6.1	UN1711	II	POISON**		153	202	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Xylidines, solid	6.1	UN3452	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Xylyl bromide, liquid	6.1	UN1701	II	POISON**	N33	None	340	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Xylyl bromide, solid	6.1	UN3417	II	POISON**	N33	None	340	Accepted only when packaged under applicable special permit or 49CFR 173.13
	<i>p</i> -Xylyl diazide	Forbid- den							
	Zinc ammonium nitrite	5.1	UN1512	II	OXIDIZER		None	212	
	Zinc arsenate <i>or</i> Zinc arsenite <i>or</i> Zinc arsenate and zinc arsenite mixtures	6.1	UN1712	II	POISON**		153	212	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Zinc ashes	4.3	UN1435	III	DANGEROUS WHEN WET**		151	213	Accepted only when packaged under applicable special permit, 49CFR 173.13 or 173.151
	Zinc bisulfite solution <i>see</i> Bisulfites, inorganic aqueous solutions, n.o.s.								
	Zinc bromate	5.1	UN2469	III	OXIDIZER		152	213	
	Zinc chlorate	5.1	UN1513	II	OXIDIZER	N34	152	212	
	Zinc chloride, anhydrous	8	UN2331	III	CORROSIVE		None	213	
	Zinc chloride, solution	8	UN1840	III	CORROSIVE		154	203	
	Zinc cyanide	6.1	UN1713	I	POISON**		None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13. Not to exceed 10 lb. (4.45kg) per package- see RQ Table
	Zinc dithionite <i>or</i> Zinc hydrosulfite	9	UN1931	III	NONE		155	204	
	Zinc ethyl, <i>see</i> Diethylzinc								
	Zinc fluorosilicate	6.1	UN2855	III	POISON**		153	213	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Zinc hydrosulfite, <i>see</i> Zinc dithionite								
	Zinc muriate solution, <i>see</i> Zinc chloride, solution								
	Zinc nitrate	5.1	UN1514	II	OXIDIZER		152	212	
	Zinc permanganate	5.1	UN1515	II	OXIDIZER		152	212	
	Zinc peroxide	5.1	UN1516	II	OXIDIZER		152	212	
	Zinc phosphide	4.3 (6.1)	UN1714	I	DANGEROUS WHEN WET, POISON**	N40	None	211	Accepted only when packaged under applicable special permit or 49CFR 173.13
	Zinc powder <i>or</i> Zinc dust	4.3 (4.2)	UN1436	I	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE	N40	None	211	Not Accepted by FedEx Ground
	Zinc powder <i>or</i> Zinc dust	4.3 (4.2)	UN1436	II	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	212	Not Accepted by FedEx Ground
	Zinc powder <i>or</i> Zinc dust	4.3 (4.2)	UN1436	III	DANGEROUS WHEN WET, SPONTANEOUSLY COMBUSTIBLE		None	213	Not Accepted by FedEx Ground
	Zinc resinate	4.1	UN2714	III	FLAMMABLE SOLID		151	213	
	Zinc selenate, <i>see</i> Selenates <i>or</i> Selenites								
	Zinc selenite, <i>see</i> Selenates <i>or</i> Selenites								

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## FedEx Ground Hazardous Materials Table

D.O.T. Basic Description for Hazardous Material Shipments									
Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label codes	Special provisions	Exceptions	NonBulk	FedEx Ground Restrictions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(9)
	<i>Zinc silicofluoride, see Zinc fluorosilicate</i>								
	<b>Zirconium, dry, coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)</b>	4.1	UN2858	III	FLAMMABLE SOLID		151	213	
	<b>Zirconium, dry, finished sheets, strip or coiled wire</b>	4.2	UN2009	III	SPONTANEOUSLY COMBUSTIBLE		None	213	<b>Not Accepted by FedEx Ground</b>
	<b>Zirconium hydride</b>	4.1	UN1437	II	FLAMMABLE SOLID	N34	None	212	
	<b>Zirconium nitrate</b>	5.1	UN2728	III	OXIDIZER		152	213	
	<b>Zirconium picramate, dry or wetted with less than 20 percent water, by mass</b>	1.3C	UN0236	II	EXPLOSIVE 1.3C		None	62	<b>Not Accepted by FedEx Ground</b>
	<b>Zirconium picramate, wetted with not less than 20 percent water, by mass</b>	4.1	UN1517	I	FLAMMABLE SOLID	23, N41	None	211	
	<b>Zirconium powder, dry</b>	4.2	UN2008	I	SPONTANEOUSLY COMBUSTIBLE		None	211	<b>Not Accepted by FedEx Ground</b>
	<b>Zirconium powder, dry</b>	4.2	UN2008	II	SPONTANEOUSLY COMBUSTIBLE	N5, N34	None	212	<b>Not Accepted by FedEx Ground</b>
	<b>Zirconium powder, dry</b>	4.2	UN2008	III	SPONTANEOUSLY COMBUSTIBLE		None	213	<b>Not Accepted by FedEx Ground</b>
	<b>Zirconium powder, wetted with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 849 microns</b>	4.1	UN1358	II	FLAMMABLE SOLID	N34	None	212	
	<b>Zirconium scrap</b>	4.2	UN1932	III	SPONTANEOUSLY COMBUSTIBLE	N34	None	213	<b>Not Accepted by FedEx Ground</b>
	<b>Zirconium suspended in a liquid</b>	3	UN1308	I	FLAMMABLE LIQUID		None	201	
	<b>Zirconium suspended in a liquid</b>	3	UN1308	II	FLAMMABLE LIQUID		None	202	
	<b>Zirconium suspended in a liquid</b>	3	UN1308	III	FLAMMABLE LIQUID		150	203	
	<b>Zirconium tetrachloride</b>	8	UN2503	III	CORROSIVE		154	213	

Note: Proper shipping names that must include a technical name in parentheses are indicated by the letter G in column 1

\*\* Column 6: See column 9 for FedEx Ground restrictions

## **Special provisions (49 CFR 172.102)**

*Tables of special provisions.* The following tables list, and set forth the requirements of, the special provisions referred to in Column 7 of the §172.102 Table or FedEx Ground Hazardous Materials Table. FedEx Ground may have additional restrictions; refer to Column 9 in the Hazardous Materials Table of this guide.

(a) General. When Column 7 of the §172.101 Table refers to a special provision for a hazardous material, the meaning and requirements of that provision are as set forth in this section. When a special provision specifies packaging or packaging requirements-

- 1) The special provision is in addition to the standard requirements for all packagings prescribed in §173.24 of this subchapter and any other applicable packaging requirements in subparts A and B of part 173 of this subchapter; and
- 2) To the extent a special provision imposes limitations or additional requirements on the packaging provisions set forth in Column 8 of the §172.101 Table, packagings must conform to the requirements of the special provision.

### **Code/Special Provisions**

**1** This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone A (see §173.116(a) or §173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

**2** This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone B (see §173.116(a) or §173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

**3** This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone C (see §173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

**4** This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone D (see §173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

**5** If this material meets the definition for a material poisonous by inhalation (see §171.8 of this subchapter), a shipping name must be selected which identifies the inhalation hazard, in Division 2.3 or Division 6.1, as appropriate.

**6** This material is poisonous-by-inhalation and must be described as an inhalation hazard under the provisions of this subchapter.

**7** An ammonium nitrate fertilizer is a fertilizer formulation, containing 90% or more ammonium nitrate and no more than 0.2% organic combustible material (calculated as

carbon), which does not meet the definition and criteria of a Class 1 (explosive) material (See §173.50 of this subchapter).

**8** A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.

**9** Packaging for certain PCBs for disposal and storage is prescribed by EPA in 40 CFR 761.60 and 761.65.

**10** An ammonium nitrate mixed fertilizer is a fertilizer formulation, containing less than 90% ammonium nitrate and other ingredients, which does not meet the definition and criteria of a Class 1 (explosive) material (See §173.50 of this subchapter).

**11** The hazardous material must be packaged as either a liquid or a solid, as appropriate, depending on its physical form at 55 °C (131 °F) at atmospheric pressure.

**12** In concentrations greater than 40 percent, this material has strong oxidizing properties and is capable of starting fires in contact with combustible materials. If appropriate, a package containing this material must conform to the additional labeling requirements of §172.402 of this subchapter.

**13** The words "Inhalation Hazard" shall be entered on each shipping paper in association with the shipping description, shall be marked on each non-bulk package in association with the proper shipping name and identification number, and shall be marked on two opposing sides of each bulk package. Size of marking on bulk package must conform to §172.302(b) of this subchapter. The requirements of §§172.203(m) and 172.505 of this subchapter do not apply.

**14** Motor fuel antiknock mixtures are:

- a. Mixtures of one or more organic lead mixtures (such as tetraethyl lead, triethylmethyl lead, diethyldimethyl lead, ethyltrimethyl lead, and tetramethyl lead) with one or more halogen compounds (such as ethylene dibromide and ethylene dichloride), hydrocarbon solvents or other equally efficient stabilizers; or
- b. tetraethyl lead.

**15** This entry applies to "Chemical kits" and "First aid kits" containing one or more compatible items of hazardous materials in boxes, cases, etc. that are used for medical, analytical, diagnostic or testing purposes. For transportation by aircraft, materials forbidden for transportation by passenger aircraft or cargo aircraft may not be included in the kits. Chemical kits and first aid kits are excepted from the specification packaging requirements of this subchapter when packaged in combination packagings. Chemical kits and first aid kits are also excepted from the labeling and placarding requirements of this subchapter, except when offered for transportation or transported by air. Chemical and first aid kits may be transported in accordance with the consumer commodity and ORM exception in § 173.156, provided they meet all required conditions. Kits that are carried on board transport vehicles for first aid or operating purposes are not subject to the requirements of this subchapter.

**16** This description applies to smokeless powder and other solid propellants that are used as powder for small arms and have been classed as Division 1.3 and 4.1 in accordance with §173.56 of this subchapter.

**18** This description is authorized only for fire extinguishers listed in §173.309(b) of this subchapter meeting the following conditions:

a. Each fire extinguisher may only have extinguishing contents that are nonflammable, non-poisonous, non-corrosive and commercially free from corroding components.

b. Each fire extinguisher must be charged with a nonflammable, non-poisonous, dry gas that has a dew-point at or below minus 46.7 °C (minus 52 °F) at 101kPa (1 atmosphere) and is free of corroding components, to not more than the service pressure of the cylinder.

c. A fire extinguisher may not contain more than 30% carbon dioxide by volume or any other corrosive extinguishing agent.

d. Each fire extinguisher must be protected externally by suitable corrosion-resisting coating.

**19** For domestic transportation only, the identification number "UN1075" may be used in place of the identification number specified in Column (4) of the §172.101 Table. The identification number used must be consistent on package markings, shipping papers and emergency response information.

**21** This material must be stabilized by appropriate means (e.g., addition of chemical inhibitor, purging to remove oxygen) to prevent dangerous polymerization (see §173.21(f) of this subchapter).

**22** If the hazardous material is in dispersion in organic liquid, the organic liquid must have a flash point above 50 °C (122 °F).

**23** This material may be transported under the provisions of Division 4.1 only if it is so packed that the percentage of diluent will not fall below that stated in the shipping description at any time during transport. Quantities of not more than 500 g per package with not less than 10 percent water by mass may also be classed in Division 4.1, provided a negative test result is obtained when tested in accordance with test series 6(c) of the UN Manual of Tests and Criteria (IBR, see § 171.7 of this subchapter).

**24** Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III.

**26** This entry does not include ammonium permanganate, the transport of which is prohibited except when approved by the Associate Administrator.

**28** The dihydrated sodium salt of dichloroisocyanuric acid is not subject to the requirements of this subchapter.



**29** Lithium cells and batteries and equipment containing or packed with lithium cells and batteries which do not comply with the provisions of §173.185 of this subchapter may be transported only if they are approved by the Associate Administrator.

**30** Sulfur is not subject to the requirements of this subchapter if transported in a non-bulk packaging or if formed to a specific shape (e.g., prills, granules, pellets, pastilles, or flakes).

**31** Materials which have undergone sufficient heat treatment to render them non-hazardous are not subject to the requirements of this subchapter.

**32** Polymeric beads and molding compounds may be made from polystyrene, poly(methyl methacrylate) or other polymeric material.

**33** Ammonium nitrites and mixtures of an inorganic nitrite with an ammonium salt are prohibited.

**34** The commercial grade of calcium nitrate fertilizer, when consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10 percent ammonium nitrate and at least 12 percent water of crystallization, is not subject to the requirements of this subchapter.

**35** Antimony sulphides and oxides which do not contain more than 0.5 percent of arsenic calculated on the total mass do not meet the definition of Division 6.1.

**36** The maximum net quantity per package is 5 L (1 gallon) or 5 kg (11 pounds).

**37** Unless it can be demonstrated by testing that the sensitivity of the substance in its frozen state is no greater than in its liquid state, the substance must remain liquid during normal transport conditions. It must not freeze at temperatures above  $-15^{\circ}\text{C}$  ( $5^{\circ}\text{F}$ ).

**38** If this material shows a violent effect in laboratory tests involving heating under confinement, the labeling requirements of Special Provision 53 apply, and the material must be packaged in accordance with packing method OP6 in §173.225 of this subchapter. If the SADT of the technically pure substance is higher than  $75^{\circ}\text{C}$ , the technically pure substance and formulations derived from it are not self-reactive materials and, if not meeting any other hazard class, are not subject to the requirements of this subchapter.

**39** This substance may be carried under provisions other than those of Class 1 only if it is so packed that the percentage of water will not fall below that stated at any time during transport. When phlegmatized with water and inorganic inert material, the content of urea nitrate must not exceed 75 percent by mass and the mixture should not be capable of being detonated by test 1(a)(i) or test 1(a)(ii) in the UN Recommendations Tests and Criteria (IBR, see § 171.7 of this subchapter).

**40** Polyester resin kits consist of two complete components: a base material (Class 3, Packing Group II or III) and an activator (organic peroxide), each separately packed in an

inner packaging. The organic peroxide must be Type D, E, or F, not requiring temperature control, and be limited to a quantity of 125 mL (4.22 ounces) per inner packaging if liquid, and 500 g (1 pound) if solid. The components may be placed in the same outer packaging provided they will not interact dangerously in the event of leakage. Packing group will be II or III, according to the criteria for Class 3, applied to the base material.

**43** The membrane filters, including paper separators and coating or backing materials, that are present in transport, must not be able to propagate a detonation as tested by one of the tests described in the UN Manual of Tests and Criteria, Part I, Test series 1(a) (IBR, see § 171.7 of this subchapter). On the basis of the results of suitable burning rate tests, and taking into account the standard tests in the UN Manual of Tests and Criteria, Part III, subsection 33.2.1 (IBR, see § 171.7 of this subchapter), nitrocellulose membrane filters in the form in which they are to be transported that do not meet the criteria for a Division 4.1 material are not subject to the requirements of this subchapter. Packagings must be so constructed that explosion is not possible by reason of increased internal pressure. Nitrocellulose membrane filters covered by this entry, each with a mass not exceeding 0.5 g, are not subject to the requirements of this subchapter when contained individually in an article or a sealed packet.

**44** The formulation must be prepared so that it remains homogenous and does not separate during transport. Formulations with low nitrocellulose contents and neither showing dangerous properties when tested for their ability to detonate, deflagrate or explode when heated under defined confinement by the appropriate test methods and criteria in the UN Recommendations, Tests and Criteria (IBR, see § 171.7 of this subchapter), nor classed as a Division 4.1 (flammable solid) when tested in accordance with the procedures specified in § 173.124 of this subchapter (chips, if necessary, crushed and sieved to a particle size of less than 1.25 mm) are not subject to the requirements of this subchapter.

**46** This material must be packed in accordance with packing method OP6 (see §173.225 of this subchapter). During transport, it must be protected from direct sunshine and stored (or kept) in a cool and well-ventilated place, away from all sources of heat.

**47** Mixtures of solids that are not subject to this subchapter and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Except when the liquids are fully absorbed in solid material contained in sealed bags, each packaging must correspond to a designed type that has passed a leakproofness test at the Packing Group II level. Small inner packagings consisting of sealed packets containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed into a solid material are not subject to this subchapter provided there is no free liquid in the packet.

**48** Mixtures of solids which are not subject to this subchapter and toxic liquids may be transported under this entry without first applying the classification criteria of Division 6.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level. This entry may not be used for solids containing a Packing Group I liquid.

**49** Mixtures of solids which are not subject to this subchapter and corrosive liquids may be transported under this entry without first applying the classification criteria of Class 8, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level.

**50** Cases, cartridge, empty with primer which are made of metallic or plastic casings and meeting the classification criteria of Division 1.4 are not regulated for domestic transportation.

**51** This description applies to items previously described as "Toy propellant devices, Class C" and includes reloadable kits. Model rocket motors containing 30 grams or less propellant are classed as Division 1.4S and items containing more than 30 grams of propellant but not more than 62.5 grams of propellant are classed as Division 1.4C.

**52** This entry may only be used for substances that do not exhibit explosive properties of Class 1 (explosive) when tested in accordance with Test Series 1 and 2 of Class 1 (explosive) in the UN Manual of Tests and Criteria, Part I (incorporated by reference: see § 171.7 of this subchapter).

**53** Packages of these materials must bear the subsidiary risk label, "EXPLOSIVE", and the subsidiary hazard class/division must be entered in parentheses immediately following the primary hazard class in the shipping description, unless otherwise provided in this subchapter or through an approval issued by the Associate Administrator, or the competent authority of the country or origin. A copy of the approval shall accompany the shipping papers.

**54** Maneb or maneb preparations not meeting the definition of Division 4.3 or any other hazard class are not subject to the requirements of this subchapter when transported by motor vehicle, rail car, or aircraft.

**55** This device must be approved in accordance with §173.56 of this subchapter by the Associate Administrator.

**56** A means to interrupt and prevent detonation of the detonator from initiating the detonating cord must be installed between each electric detonator and the detonating cord ends of the jet perforating guns before the charged jet perforating guns are offered for transportation.

**57** Maneb or Maneb preparations stabilized against self-heating need not be classified in Division 4.2 when it can be demonstrated by testing that a volume of 1 m<sup>3</sup> of substance does not self-ignite and that the temperature at the center of the sample does not exceed 200 °C, when the sample is maintained at a temperature of not less than 75 °C ± 2 °C for a period of 24 hours, in accordance with procedures set forth for testing self-heating materials in the UN Manual of Tests and Criteria (IBR, see § 171.7 of this subchapter).

**58** Aqueous solutions of Division 5.1 inorganic solid nitrate substances are considered as not meeting the criteria of Division 5.1 if the concentration of the substances in solution at the minimum temperature encountered in transport is not greater than 80% of the saturation limit.

**59** Ferrocerium, stabilized against corrosion, with a minimum iron content of 10 percent is not subject to the requirements of this subchapter.

**60** After September 30, 1997, an oxygen generator, chemical, that is shipped with its means of initiation attached must incorporate at least two positive means of preventing unintentional actuation of the generator, and be classed and approved by the Associate Administrator. The procedures for approval of a chemical oxygen generator that contains an explosive means of initiation (e.g., a primer or electric match) are specified in § 173.56 of this subchapter. Each person who offers a chemical oxygen generator for transportation after September 30, 1997, shall: (1) ensure that it is offered in conformance with the conditions of the approval; (2) maintain a copy of the approval at each facility where the chemical oxygen generator is packaged; and (3) mark the approval number on the outside of the package.

**61** A chemical oxygen generator is spent if its means of ignition and all or a part of its chemical contents have been expended.

**64** The group of alkali metals includes lithium, sodium, potassium, rubidium, and caesium.

**65** The group of alkaline earth metals includes magnesium, calcium, strontium, and barium.

**66** Formulations of these substances containing not less than 30 percent non-volatile, non-flammable phlegmatizer are not subject to this subchapter.

**70** Black powder that has been classed in accordance with the requirements of §173.56 of this subchapter may be reclassified and offered for domestic transportation as a Division 4.1 material if it is offered for transportation and transported in accordance with the limitations and packaging requirements of §173.170 of this subchapter.

**74** During transport, this material must be protected from direct sunshine and stored or kept in a cool and well-ventilated place, away from all sources of heat.

**77** For domestic transportation, a Division 5.1 subsidiary risk label is required only if a carbon dioxide and oxygen mixture contains more than 23.5% oxygen.

**78** This entry may not be used to describe compressed air which contains more than 23.5 percent oxygen. An oxidizer label is not required for any oxygen concentration of 23.5 percent or less.

**79** This entry may not be used for mixtures that meet the definition for oxidizing gas.

**81** Polychlorinated biphenyl items, as defined in 40 CFR 761.3, for which specification packagings are impractical, may be packaged in non-specification packagings meeting the

general packaging requirements of subparts A and B of part 173 of this subchapter. Alternatively, the item itself may be used as a packaging if it meets the general packaging requirements of subparts A and B of part 173 of this subchapter.

**101** The name of the particular substance or article must be specified.

**102** The ends of the detonating cord must be tied fast so that the explosive cannot escape. The articles may be transported as in Division 1.4 Compatibility Group D (1.4D) if all of the conditions specified in §173.63(a) of this subchapter are met.

**103** Detonators which will not mass detonate and undergo only limited propagation in the shipping package may be assigned to 1.4B classification code. Mass detonate means that more than 90 percent of the devices tested in a package explode practically simultaneously. Limited propagation means that if one detonator near the center of a shipping package is exploded, the aggregate weight of explosives, excluding ignition and delay charges, in this and all additional detonators in the outside packaging that explode may not exceed 25 grams.

**105** The word "Agents" may be used instead of "Explosives" when approved by the Associate Administrator.

**106** The recognized name of the particular explosive may be specified in addition to the type.

**107** The classification of the substance is expected to vary especially with the particle size and packaging but the border lines have not been experimentally determined; appropriate classifications should be verified following the test procedures in §§173.57 and 173.58 of this subchapter.

**108** Fireworks must be so constructed and packaged that loose pyrotechnic composition will not be present in packages during transportation.

**109** Rocket motors must be nonpropulsive in transportation unless approved in accordance with §173.56 of this subchapter. A rocket motor to be considered "nonpropulsive" must be capable of unrestrained burning and must not appreciably move in any direction when ignited by any means.

**110** Fire extinguishers transported under UN1044 may include installed actuating cartridges (cartridges, power device of Division 1.4C or 1.4S), without changing the classification of Division 2.2, provided the aggregate quantity of deflagrating (propellant) explosives does not exceed 3.2 grams per extinguishing unit.

**111** Explosive substances of Division 1.1 Compatibility Group A (1.1A) are forbidden for transportation if dry or not desensitized, unless incorporated in a device.

**113** The sample must be given a tentative approval by an agency or laboratory in accordance with §173.56 of this subchapter.

**114** Jet perforating guns, charged, oil well, without detonator may be reclassified to Division 1.4 Compatibility Group D (1.4D) if the following conditions are met:

- a. The total weight of the explosive contents of the shaped charges assembled in the guns does not exceed 90.5 kg (200 pounds) per vehicle; and
- b. The guns are packaged in accordance with Packing Method US 1 as specified in §173.62 of this subchapter.

**115** Boosters with detonator, detonator assemblies and boosters with detonators in which the total explosive charge per unit does not exceed 25 g, and which will not mass detonate and undergo only limited propagation in the shipping package may be assigned to 1.4B classification code. Mass detonate means more than 90 percent of the devices tested in a package explode practically simultaneously. Limited propagation means that if one booster near the center of the package is exploded, the aggregate weight of explosives, excluding ignition and delay charges, in this and all additional boosters in the outside packaging that explode may not exceed 25 g.

**116** Fuzes, detonating may be classed in Division 1.4 if the fuzes do not contain more than 25 g of explosive per fuze and are made and packaged so that they will not cause functioning of other fuzes, explosives or other explosive devices if one of the fuzes detonates in a shipping packaging or in adjacent packages.

**117** If shipment of the explosive substance is to take place at a time that freezing weather is anticipated, the water contained in the explosive substance must be mixed with denatured alcohol so that freezing will not occur.

**118** This substance may not be transported under the provisions of Division 4.1 unless specifically authorized by the Associate Administrator.

**119** This substance, when in quantities of not more than 11.5 kg (25.3 pounds), with not less than 10 percent water, by mass, also may be classed in Division 4.1, provided a negative test result is obtained when tested in accordance with test series 6(c) of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).

**120** The phlegmatized substance must be significantly less sensitive than dry PETN.

**121** This substance, when containing less alcohol, water or phlegmatizer than specified, may not be transported unless approved by the Associate Administrator.

**123** Any explosives, blasting, type C containing chlorates must be segregated from explosives containing ammonium nitrate or other ammonium salts.

**125** Lactose or glucose or similar materials may be used as a phlegmatizer provided that the substance contains not less than 90%, by mass, of phlegmatizer. These mixtures may be classified in Division 4.1 when tested in accordance with test series 6(c) of the UN Manual of Tests and Criteria (IBR, see § 171.7 of this subchapter) and approved by the Associate Administrator. Testing must be conducted on at least three packages as prepared for

transport. Mixtures containing at least 98%, by mass, of phlegmatizer are not subject to the requirements of this subchapter. Packages containing mixtures with not less than 90% by mass, of phlegmatizer need not bear a POISON subsidiary risk label.

**127** Mixtures containing oxidizing and organic materials transported under this entry may not meet the definition and criteria of a Class 1 material. (See § 173.50 of this subchapter.)

**128** Regardless of the provisions of § 172.101(c)(12), aluminum smelting by-products and aluminum remelting by-products described under this entry, meeting the definition of Class 8, Packing Group II and III may be classed as a Division 4.3 material and transported under this entry. The presence of a Class 8 hazard must be communicated as required by this Part for subsidiary hazards.

**129.** These materials may not be classified and transported unless authorized by the Associate Administrator on the basis of results from Series 2 Test and a Series 6(c) Test from the UN Manual of Tests and Criteria (IBR, see § 171.7 of this subchapter) on packages as prepared for transport. The packing group assignment and packaging must be approved by the Associate Administrator on the basis of the criteria in § 173.21 of this subchapter and the package type used for the Series 6(c) test.

**130.** For other than a dry battery specifically covered by another entry in the § 172.101 Table, "Batteries, dry" are not subject to the requirements of this subchapter only when they are securely packaged and offered for transportation in a manner that prevents the dangerous evolution of heat (for example, by the effective insulation of exposed terminals) and protects against short circuits..

**131.** This material may not be offered for transportation unless approved by the Associate Administrator.

**132.** This entry may only be used for uniform, ammonium nitrate based fertilizer mixtures, containing nitrogen, phosphate or potash, meeting the following criteria: (1) Contains not more than 70% ammonium nitrate and not more than 0.4% total combustible, organic material calculated as carbon or (2) Contains not more than 45% ammonium nitrate and unrestricted combustible material.

**134.** This entry only applies to vehicles, machinery and equipment powered by wet batteries, sodium batteries or lithium batteries that are transported with these batteries installed. Examples of such items are electrically-powered cars, lawn mowers, wheelchairs and other mobility aids. Self-propelled vehicles which also contain an internal combustion engine must be consigned under the entry "Vehicle, flammable gas powered" or "Vehicle, flammable liquid powered", as appropriate. Except as provided in Special Provision A102, vehicles, machinery and equipment powered by primary lithium batteries that are transported with these batteries installed are forbidden aboard passenger-carrying aircraft.

**135.** The entries "Vehicle, flammable gas powered" or "Vehicle, flammable liquid powered", as appropriate, must be used when internal combustion engines are installed in a vehicle.

These entries include hybrid electric vehicles powered by both an internal combustion engine and batteries.

**136.** This entry only applies to machinery and apparatus containing hazardous materials as in integral element of the machinery or apparatus. It may not be used to describe machinery or apparatus for which a proper shipping name exists in the § 172.101 Table. Except when approved by the Associate Administrator, machinery or apparatus may only contain hazardous materials for which exceptions are referenced in Column (8) of the § 172.101 Table and are provided in part 173, subpart D, of this subchapter. Hazardous materials shipped under this entry are excepted from the labeling requirements of this subchapter unless offered for transportation or transported by aircraft and are not subject to the placarding requirements of part 172, subpart F, of this subchapter. Orientation markings as described in § 172.312(a)(2) are required when liquid hazardous materials may escape due to incorrect orientation. The machinery or apparatus, if unpackaged, or the packaging in which it is contained shall be marked "Dangerous goods in machinery" or "Dangerous goods in apparatus", as appropriate, with the identification number UN3363. For transportation by aircraft, machinery or apparatus may not contain any material forbidden for transportation by passenger or cargo aircraft. The Associate Administrator may except from the requirements of this subchapter, equipment, machinery and apparatus provided:

- a. It is shown that it does not pose a significant risk in transportation;
- b. The quantities of hazardous materials do not exceed those specified in § 173.4 of this subchapter; and
- c. The equipment, machinery or apparatus conforms with § 173.222 of this subchapter.

**137.** Cotton, dry; flax, dry; and sisal, dry are not subject to the requirements of this subchapter when they are baled in accordance with ISO 8115, "Cotton Bales - Dimensions and Density" (IBR, see § 171.7 of this subchapter) to a density of not less than 360 kg/m<sup>3</sup> (22.1 lb/ft<sup>3</sup>) for cotton, 400 kg/m<sup>3</sup> (24.97 lb/ft<sup>3</sup>) for flax and 620 kg/m<sup>3</sup> (38.71 lb/ft<sup>3</sup>) for sisal and transported in a freight container or closed transport vehicle.

**138.** Lead compounds which, when mixed in a ratio of 1:1000 with 0.07M (Molar concentration) hydrochloric acid and stirred for one hour at a temperature of 23°C ± 2°C, exhibit a solubility of 5% or less are considered insoluble.

**139.** Use of the "special arrangement" proper shipping names for international shipments must be made under an IAEA Certificate of Competent Authority issued by the Associate Administrator in accordance with the requirements in § 173.471, § 173.472, or § 173.473 of this subchapter. Use of these proper shipping names for domestic shipments may be made only under a DOT exemption, as defined in, and in accordance with the requirements of subpart B of part 107 of this subchapter.

**140.** This material is regulated only when it meets the defining criteria for a hazardous substance or a marine pollutant. In addition, the column 5 reference is modified to read "III" on those occasions when this material is offered for transportation or transported by highway or rail.



**141.** A toxin obtained from a plant, animal, or bacterial source containing an infectious substance, or a toxin contained in an infectious substance, must be classed as Division 6.2, described as an infectious substance, and assigned to UN 2814 or UN 2900, as appropriate.

**142.** These hazardous materials may not be classified and transported unless authorized by the Associate Administrator. The Associate Administrator will base the authorization on results from Series 2 tests and a Series 6(c) test from the UN Manual of Tests and Criteria (IBR, see § 171.7 of this subchapter) on packages as prepared for transport in accordance with the requirements of this subchapter.

**144** If transported as a residue in an underground storage tank (UST), as defined in 40 CFR 280.12, that has been cleaned and purged or rendered inert according to the American Petroleum Institute (API) Standard 1604 (IBR, see Sec. 171.7 of this subchapter), then the tank and this material are not subject to any other requirements of this subchapter. However, sediments remaining in the tank that meet the definition for a hazardous material are subject to the applicable regulations of this subchapter.

**145** This entry applies to formulations that neither detonate in the cavitated state nor deflagrate in laboratory testing, show no effect when heated under confinement, exhibit no explosive power, and are thermally stable (self-accelerating decomposition temperature (SADT) at 60 [deg]C (140 [deg]F) or higher for a 50 kg (110.2 lbs.) package). Formulations not meeting these criteria must be transported under the provisions applicable to the appropriate entry in the Organic Peroxide Table in Sec. 173.225 of this subchapter.

**146** This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in Sec. 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.

**147** This entry applies to non-sensitized emulsions, suspensions and gels consisting primarily of a mixture of ammonium nitrate and a fuel intended to produce a Type E blasting explosive only after further processing. The mixture typically has the following composition: 60--85% ammonium nitrate; 5--30% water; 2--8% fuel; 0.5--4% emulsifier or thickening agent; 0--10% soluble flame suppressants; and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate. These substances may not be classified and transported unless approved by the Associate Administrator.

**149** When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in Sec. 173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons).

**150** This description may be used only for uniform mixtures of fertilizers containing ammonium nitrate as the main ingredient within the following composition limits:  
a. Not less than 90% ammonium nitrate with not more than 0.2% total combustible, organic material calculated as carbon, and with added matter, if any, that is inorganic and inert when in contact with ammonium nitrate; or

b. Less than 90% but more than 70% ammonium nitrate with other inorganic materials, or more than 80% but less than 90% ammonium nitrate mixed with calcium carbonate and/or dolomite, and not more than 0.4% total combustible, organic material calculated as carbon; or  
c. Ammonium nitrate-based fertilizers containing mixtures of ammonium nitrate and ammonium sulphate with more than 45% but less than 70% ammonium nitrate, and not more than 0.4% total combustible, organic material calculated as carbon such that the sum of the percentage of compositions of ammonium nitrate and ammonium sulphate exceeds 70%.

**151** If this material meets the definition of a flammable liquid in Sec.173.120 of this subchapter, a FLAMMABLE LIQUID label is also required and the basic description on the shipping paper must indicate the Class 3 subsidiary hazard.

**155** Fish meal or fish scrap may not be transported if the temperature at the time of loading either exceeds 35 [deg]C (95 [deg]F), or exceeds 5 [deg]C (41 [deg]F) above the ambient temperature, whichever is higher.

**156** Asbestos that is immersed or fixed in a natural or artificial binder material, such as cement, plastic, asphalt, resins or mineral ore, or contained in manufactured products is not subject to the requirements of this subchapter.

**157** This entry includes hybrid electric vehicles powered by both an internal combustion engine and wet, sodium or lithium batteries installed. Vehicles containing an internal combustion engine must be consigned under the entry "Vehicle, flammable gas powered" or "Vehicle, flammable liquid powered", as appropriate. Except as provided in Special Provision A102, vehicles powered by primary lithium batteries, that are transported with these batteries installed are forbidden aboard passenger-carrying aircraft.

**159** This material must be protected from direct sunshine and kept in a cool, well-ventilated place away from sources of heat.

**160** This entry applies to articles that are used as life-saving vehicle air bag inflators, air bag modules or seat-belt pretensioners containing Class 1 (explosive) materials or materials of other hazard classes. Air bag inflators and modules must be tested in accordance with Test series 6(c) of Part I of the UN Manual of Tests and Criteria (incorporated by reference; see Sec. 171.7 of this subchapter), with no explosion of the device, no fragmentation of device casing or pressure vessel, and no projection hazard or thermal effect that would significantly hinder fire-fighting or other emergency response efforts in the immediate vicinity. If the air bag inflator unit satisfactorily passes the series 6(c) test, it is not necessary to repeat the test on the air bag module.

**161** For domestic transport, air bag inflators, air bag modules or seat belt pretensioners that meet the criteria for a Division 1.4G explosive must be transported using the description, "Articles, pyrotechnic for technical purposes," UN0431.

**162** This material may be transported under the provisions of Division 4.1 only if it is packed so that at no time during transport will the percentage of diluent fall below the percentage that is stated in the shipping description.

**163** Substances must satisfactorily pass Test Series 8 of the UN Manual of Tests and Criteria, Part I, Section 18 (IBR, see Sec. 171.7 of this subchapter).

**164** Substances must not be transported under this entry unless approved by the Associate Administrator on the basis of the results of appropriate tests according to Part I of the UN Manual of Tests and Criteria (IBR, see Sec. 171.7 of this subchapter). The material must be packaged so that the percentage of diluent does not fall below that stated in the approval at any time during transportation.

**165** These substances are susceptible to exothermic decomposition at elevated temperatures. Decomposition can be initiated by heat, moisture or by impurities (e.g., powdered metals (iron, manganese, cobalt, magnesium)). During the course of transportation, these substances must be shaded from direct sunlight and all sources of heat and be placed in adequately ventilated areas.

**166** When transported in non-friable tablet form calcium hypochlorite, dry or hydrated, may be transported as a Packing Group III material.

**167** These storage systems shall always be considered as containing hydrogen.

**170** Air must be eliminated from the vapor space by nitrogen or other means.

**171** This entry may only be used when the material is transported in non-friable tablet form or for granular or powdered mixtures that have been shown to meet the PG III criteria in Sec. 173.127.

**172** This entry includes alcohol mixtures containing up to 5% petroleum products.

**173** An appropriate generic entry may be used for this material.

“N” codes as found in column 7 of the §172.102 Table or FedEx ground Hazardous Materials Table. FedEx Ground may have additional restrictions; refer to Column 9 of this guide.

### Code/Special Provisions

**N3** Glass inner packagings are permitted in combination or composite packagings only if the hazardous material is free from hydrofluoric acid.

**N4** For combination or composite packagings, glass inner packagings, other than ampoules, are not permitted.

**N5** Glass materials of construction are not authorized for any part of a packaging which is normally in contact with the hazardous material.

**N6** Battery fluid packaged with electric storage batteries, wet or dry, must conform to the packaging provisions of §173.159 (g) or (h) of this subchapter.

**N7** The hazard class or division number of the material must be marked on the package in accordance with §172.302 of this subchapter. However, the hazard label corresponding to the hazard class or division may be substituted for the marking.

**N8** Nitroglycerin solution in alcohol may be transported under this entry only when the solution is packed in metal cans of not more than 1 L capacity each, overpacked in a wooden box containing not more than 5 L. Metal cans must be completely surrounded with absorbent cushioning material. Wooden boxes must be completely lined with a suitable material impervious to water and nitroglycerin.

**N10** Lighters and their inner packagings, which have been approved by the Associate Administrator (see §173.21(i) of this subchapter), must be packaged in one of the following outer packagings at the Packing Group II level: 4C1 or 4C2 wooden boxes; 4D plywood boxes; 4F reconstituted wood boxes; 4G fiberboard boxes; or 4H1 or 4H2 plastic boxes. The approval number (e.g., T-\* \* \*) must be marked on each outer package and on the shipping paper.

**N11** This material is excepted for the specification packaging requirements of this subchapter if the material is packaged in strong, tight non-bulk packaging meeting the requirements of subparts A and B of part 173 of this subchapter.

**N12** Plastic packagings are not authorized.

**N20** A 5M1 multi-wall paper bag is authorized if transported in a closed transport vehicle.

**N25** Steel single packagings are not authorized.

**N32** Aluminum materials of construction are not authorized for single packagings.

**N33** Aluminum drums are not authorized.

**N34** Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

**N36** Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum.

**N37** This material may be shipped in an integrally-lined fiber drum (1G) which meets the general packaging requirements of subpart B of part 173 of this subchapter, the requirements of part 178 of this subchapter at the packing group assigned for the material and to any other special provisions of column 7 of the §172.101 table.

**N40** This material is not authorized in the following packagings:

- a. A combination packaging consisting of a 4G fiberboard box with inner receptacles of glass or earthenware;
- b. A single packaging of a 4C2 sift-proof, natural wood box; or
- c. A composite packaging 6PG2 (glass, porcelain or stoneware receptacles within a fiberboard box).

**N41** Metal construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

**N42** 1A1 drums made of carbon steel with thickness of body and heads of not less than 1.3 mm (0.050 inch) and with a corrosion-resistant phenolic lining are authorized for stabilized benzyl chloride if tested and certified to the Packing Group I performance level at a specific gravity of not less than 1.8.

**N43** Metal drums are permitted as single packagings only if constructed of nickel or monel.

**N45** Copper cartridges are authorized as inner packagings if the hazardous material is not in dispersion.

**N65** Outage must be sufficient to prevent cylinders or spheres from becoming liquid full at 55 °C (130 °F). The vacant space (outage) may be charged with a nonflammable nonliquefied compressed gas if the pressure in the cylinder or sphere at 55 °C (130 °F) does not exceed 125 percent of the marked service pressure.

**N72** Packagings must be examined by the Bureau of Explosives and approved by the Associate Administrator.

**N73** Packagings consisting of outer wooden or fiberboard boxes with inner glass, metal or other strong containers; metal or fiber drums; kegs or barrels; or strong metal cans are authorized and need not conform to the requirements of part 178 of this subchapter.

**N74** Packages consisting of tightly closed inner containers of glass, earthenware, metal or polyethylene, capacity not over 0.5 kg (1.1 pounds) securely cushioned and packed in outer wooden barrels or wooden or fiberboard boxes, not over 15 kg (33 pounds) net weight, are authorized and need not conform to the requirements of part 178 of this subchapter.

**N75** Packages consisting of tightly closed inner packagings of glass, earthenware or metal, securely cushioned and packed in outer wooden barrels or wooden or fiberboard boxes, capacity not over 2.5 kg (5.5 pounds) net weight, are authorized and need not conform to the requirements of part 178 of this subchapter.

**N76** For materials of not more than 25 percent active ingredient by weight, packages consisting of inner metal packagings not greater than 250 mL (8 ounces) capacity each, packed in strong outer packagings together with sufficient absorbent material to completely absorb the liquid contents are authorized and need not conform to the requirements of part 178 of this subchapter.

**N77** For materials of not more than two percent active ingredients by weight, packagings need not conform to the requirements of part 178 of this subchapter, if liquid contents are absorbed in an inert material.

**N78** Packages consisting of inner glass, earthenware, or polyethylene or other non-fragile plastic bottles or jars not over 0.5 kg (1.1 pounds) capacity each, or metal cans not over five pounds capacity each, packed in outer wooden boxes, barrels or kegs, or fiberboard boxes are authorized and need not conform to the requirements of part 178 of this subchapter. Net weight of contents in fiberboard boxes may not exceed 29 kg (64 pounds). Net weight of contents in wooden boxes, barrels or kegs may not exceed 45 kg (99 pounds).

**N79** Packages consisting of tightly closed metal inner packagings not over 0.5 kg (1.1 pounds) capacity each, packed in outer wooden or fiberboard boxes, or wooden barrels, are authorized and need not conform to the requirements of part 178 of this subchapter. Net weight of contents may not exceed 15 kg (33 pounds).

**N80** Packages consisting of one inner metal can, not over 2.5 kg (5.5 pounds) capacity, packed in an outer wooden or fiberboard box, or a wooden barrel, are authorized and need not conform to the requirements of part 178 of this subchapter.

**N82** See §173.306 of this subchapter for classification criteria for flammable aerosols.

**N83** This material may not be transported in quantities of more than 11.5 kg (25.4 lbs.) per package.

**N84** The maximum quantity per package is 500g (1.1 lbs.).

**N85** Packages certified at the Packing Group I performance level may not be used.

## Appendix A to 172.101

### List of Hazardous Substances and Reportable Quantities (RQ)

This Appendix lists materials and their corresponding reportable quantities (RQ) that are listed or designated as “Hazardous Substances” and are further regulated by other federal and state authorities. This list contains only substances with a one (1) or ten (10) pound RQ rating. Please refer to 49CFR 172.101 Appendix A for materials with higher RQ ratings. This list **does not** include radionuclides. FedEx Ground does not accept packages that have a net weight equal to or more than the applicable RQ number. Except for those materials listed in the FedEx Ground Hazardous Material Table by name, the material may not be regulated if the material has a net weight prepackage less than the RQ rating. It is the shipper’s responsibility to determine if their material, when packaged, meets or exceeds the RQ rating.

The following symbols may apply. Please refer to the “Code” column of the Hazardous Substance Listing Table:

\* The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches).

\*\* The RQ for asbestos is limited to friable forms only.

\*\*\* Indicates that the name was added by PHMSA because (1) the name is a synonym for a specific hazardous substance and (2) the name appears in the Hazardous Materials Table as a proper shipping name.

Code	Hazardous Substance	Reportable Quantity (RQ)/ pounds (kilograms)
	Acetamide, N-fluoren-2-yl	1 (0.454 kg)
	Acetic acid, fluoro-,sodium salt	10 (4.54kg)
	Acetic acid, lead (2+) salt	10 (4.54kg)
	Acetone cyanohydrin	10 (4.54kg)
	2-Acetylaminofluorene	1 (0.454 kg)
	1-Acetyl-2-thiourea	1 (0.454 kg)
	Acrolein	1 (0.454 kg)
	AldicarbD	1 (0.454 kg)
	Aldrin	1 (0.454 kg)
	4-Aminobiphenyl	1 (0.454 kg)
	Amitrole	10 (4.54kg)
	Ammonium bichromate	10 (4.54kg)
	Ammonium chromate	10 (4.54kg)
***	Ammonium dichromate	10 (4.54kg)
	Ammonium picrate	10 (4.54kg)
	Argentate(1-),bis(cyano-C)-,potassium	1 (0.454 kg)

Code	Hazardous Substance	Reportable Quantity (RQ)/ pounds (kilograms)
	Aroclor 1016	1 (0.454 kg)
	Aroclor 1221	1 (0.454 kg)
	Aroclor 1232	1 (0.454 kg)
	Aroclor 1242	1 (0.454 kg)
	Aroclor 1248	1 (0.454 kg)
	Aroclor 1254	1 (0.454 kg)
	Aroclor 1260	1 (0.454 kg)
*	Arsenic	1 (0.454 kg)
	Arsenic acid	1 (0.454 kg)
	Arsenic acid H3AsO4	1 (0.454 kg)
	Arsenic disulfide	1 (0.454 kg)
	Arsenic oxide As2O3	1 (0.454 kg)
	Arsenic oxide As2O5	1 (0.454 kg)
	Arsenic pentoxide	1 (0.454 kg)
	Arsenic trichloride	1 (0.454 kg)
	Arsenic trioxide	1 (0.454 kg)
	Arsenic trisulfide	1 (0.454 kg)
	Arsine, diethyl	1 (0.454 kg)
	Arsinic acid, dimethyl	1 (0.454 kg)
	Arsonous dichloride, phenyl-	1 (0.454 kg)
**	Asbestos	1 (0.454 kg)
	Azaserine	1 (0.454 kg)
	Aziridine	1 (0.454 kg)
	Aziridine, 2-methyl-	1 (0.454 kg)
	Azirino[2',3':3,4]pyrrolo(1,2-a)indole-4,7-dione,6-amino-8- [[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a, 8b-hexahydro-8a- methoxy-5-methyl-,[1aS-[aalpha,8beta,8aalpha,8balpha)]-	10 (4.54kg)
	Barium cyanide	10 (4.54kg)
	Benz[j]aceanthrylene,1,2-dihydro-3-methyl-	10 (4.54kg)
	Benz[a]anthracene	10 (4.54kg)
	1,2-Benzanthracene	10 (4.54kg)
	Benz[a]anthracene, 7,12-dimethyl-	1 (0.454 kg)
	Benzenamine, N,N-dimethyl-4-(phenylazo)-	10 (4.54kg)
	Benzenamine, 4,4'-methylenebis(2-chloro-	10 (4.54kg)
	Benzene	10 (4.54kg)
	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro	1 (0.454 kg)
	Benzene, hexachloro-	10 (4.54kg)
	Benzene, 1-methyl-2, 4-dinitro-	10 (4.54kg)
	Benzene, pentachloro-	10 (4.54kg)
	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-	1 (0.454 kg)
	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy)	1 (0.454 kg)
	Benzene, (trichloromethyl)	10 (4.54kg)
	Benzene, 1,3,5-trinitro-	10 (4.54kg)



Code	Hazardous Substance	Reportable Quantity (RQ)/ pounds (kilograms)
	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	10 (4.54kg)
	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	10 (4.54kg)
	Benzenediamine, ar-methyl-	10 (4.54kg)
	1,2-Benzenedicarboxylic acid, dibutyl ester	10 (4.54kg)
	Benzidine	1 (0.454 kg)
	Benzo[a]anthracene	10 (4.54kg)
	1,3-Benzodioxole, 5-propyl-	10 (4.54kg)
	Benzo[b]fluoranthene	1 (0.454 kg)
	Benzo[a]pyrene	1(0.454 kg)
	3,4-Benzopyrene	1 (0.454 kg)
	p-Benzoquinone	10 (4.54kg)
	Benzo[rs]t]pentaphene	10 (4.54kg)
	Benzotrichloride	10 (4.54kg)
*	Beryllium	10 (4.54kg)
	Beryllium chloride	1 (0.454 kg)
*	Beryllium dust	10 (4.54kg)
	Beryllium fluoride	1 (0.454 kg)
	Beryllium nitrate	1 (0.454 kg)
	alpha-BHC	10 (4.54kg)
	beta- BHC	1 (0.454 kg)
	delta-BHC	1 (0.454 kg)
	gamma-BHC	1 (0.454 kg)
	2,2' -Bioxirane	10 (4.54kg)
	(1,1'-Biphenyl)-4,4'-diamine	1 (0.454 kg)
	(1,1'-Biphenyl)-4, 4'-diamine,3,3'-dichloro-	1 (0.454 kg)
	(1,1'-Biphenyl)-4, 4'-diamine,3,3'-dimethoxy-	10 (4.54kg)
	(1,1'-Biphenyl)-4, 4'-diamine,3,3'-dimethyl-	10 (4.54kg)
	Bis(2-chloroethyl) ether	10 (4.54kg)
	1,3-Butadiene	10 (4.54kg)
	1,3-Butadiene,1,1,2,3,4,4-hexachloro-	1 (0.454 kg)
	1-Butanamine, N-butyl-N-nitroso-	10 (4.54kg)
	2-Butanone peroxide	10 (4.54kg)
	2-Butene, 1,4-dichloro-	1 (0.454 kg)
	2-Butenoic acid, 2-methyl-,7[[[2, 3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*, 3R*), 7aalpha]]-	10 (4.54kg)
	n-Butyl phthalate	10 (4.54kg)
	Cacodylic acid	1 (0.454 kg)
*	Cadmium	10 (4.54kg)
	Cadmium acetate	10 (4.54kg)
	Cadmium bromide	10 (4.54kg)

<b>Code</b>	<b>Hazardous Substance</b>	<b>Reportable Quantity (RQ)/ pounds (kilograms)</b>
	Cadmium chloride	10 (4.54kg)
	Calcium arsenate	1 (0.454 kg)
	Calcium arsenite	1 (0.454 kg)
	Calcium carbide	10 (4.54kg)
	Calcium chromate	10 (4.54kg)
	Calcium cyanide	10 (4.54kg)
	Calcium cyanide Ca(CN) <sub>2</sub>	10 (4.54kg)
	Calcium hypochlorite	10 (4.54kg)
	Camphene, octachloro-	1 (0.454 kg)
	Captan	1 (0.454 kg)
	Carbamic acid, methylnitroso-,ethyl ester	1 (0.454 kg)
	Carbamic chloride, dimethyl-	1 (0.454 kg)
	Carbamide, thio-	10 (4.54kg)
	Carbofuran	10 (4.54kg)
	Carbonic dichloride	10 (4.54kg)
	Carbon tetrachloride	10 (4.54kg)
	Chlorambucil	10 (4.54kg)
	Chlordane	1 (0.454 kg)
	Chlordane, alpha & gamma isomers	1 (0.454 kg)
	Chlordane, technical	1 (0.454 kg)
	Chlorine	10 (4.54kg)
	Chlorobenzilate	10 (4.54kg)
	Chloroform	10 (4.54kg)
	Chloromethyl methyl ether	1 (0.454 kg)
	Chlorpyrifos	1 (0.454 kg)
	Chromic acid	10 (4.54kg)
	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calcium salt	10 (4.54kg)
	Coke Oven Emissions	1 (0.454 kg)
***	Copper chloride	10 (4.54kg)
	Copper cyanide	10 (4.54kg)
	Copper cyanide CuCN	10 (4.54kg)
	Coumaphos	10 (4.54kg)
	Cresote	1 (0.454 kg)
	Cupric acetoarsenite	1 (0.454 kg)
	Cupric chloride	10 (4.54kg)
	Cupric sulfate	10 (4.54kg)
	Cyanides(soluble salts and complexes) not otherwise specified	10 (4.54kg)
	Cyanogen chloride	10 (4.54kg)
	Cyanogen chloride (CN)Cl	10 (4.54kg)
	2,5-Cyclohexadiene-1, 4-dione	10 (4.54kg)
	Cyclohexane,1,2,3,4,5,6-hexachloro-,(1alpha, 2alpha, 3beta, 4alpha, 5alpha, 6beta)-	1 (0.454 kg)

<b>Code</b>	<b>Hazardous Substance</b>	<b>Reportable Quantity (RQ)/ pounds (kilograms)</b>
	1,3-Cyclopentadiene,1,2,3,4,5,5-hexachloro-	10 (4.54kg)
	Cyclophosphamide	10 (4.54kg)
	Daunomycin	10 (4.54kg)
	DDD	1 (0.454 kg)
	4,4'-DDD	1 (0.454 kg)
	DDE	1 (0.454 kg)
	4,4'-DDE	1 (0.454 kg)
	DDT	1 (0.454 kg)
	4,4'-DDT	1 (0.454 kg)
	Diamine	1 (0.454 kg)
	Diazinon	1 (0.454 kg)
	Dibenz[a,h]anthracene	1 (0.454 kg)
	1, 2: 5, 6-Dibenzanthracene	1 (0.454 kg)
	Dibenzo[ah]anthracene	1 (0.454 kg)
	Dibenz[a,i]pyrene	10 (4.54kg)
	1, 2-Dibromo-3-chloropropane	1 (0.454 kg)
	Dibutyl phthalate	10 (4.54kg)
	Di-n-butyl phthalate	10 (4.54kg)
	Dichlone	1 (0.454 kg)
	3,3'-Dichlorobenzidine	1 (0.454 kg)
	1,4-Dichloro-2-butene	1 (0.454 kg)
	Dichloroethyl ether	10 (4.54kg)
	Dichloromethyl ether	1 (0.454 kg)
	Dichlorophenylarsine	1(0.454 kg)
	Dichlorvos	10 (4.54kg)
	Dicofol	10 (4.54kg)
	Dieldrin	1 (0.454 kg)
	1, 2: 3, 4-Diepoxybutane	10 (4.54kg)
	Diethylarsine	1 (0.454 kg)
	N,N'-Diethylhydrazine	10 (4.54kg)
	Diethylstilbestrol	1 (0.454 kg)
	Diethyl sulfate	
	Dihydrosafrole	10 (4.54kg)
	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro,(1alpha,4alpha,4abeta, 5abeta, 8beta, 8abeta)-	1 (0.454 kg)
	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-,(1 alpha,4alpha,4abeta, 5alpha, 8alpha, 8abeta)-	1 (0.454 kg)
	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octhydro-,(1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-	1 (0.454 kg)

Code	Hazardous Substance	Reportable Quantity (RQ)/ pounds (kilograms)
	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octhydro-(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)-	1 (0.454 kg)
	Dimethoate	10 (4.54kg)
	3,3'-Dimethoxybenzidine	10 (4.54kg)
	p-Dimethylaminoazobenzene	10 (4.54kg)
	7,12-Dimethylbenz[a]anthracene	1 (0.454 kg)
	3,3'-Dimethylbenzidine	10 (4.54kg)
	alpha,alpha-Dimethylbenzylhydroperoxide	10 (4.54kg)
	Dimethylcarbamoyl chloride	1 (0.454 kg)
	1, 1-Dimethylhydrazine	10 (4.54kg)
	1, 2-Dimethylhydrazine	1 (0.454 kg)
***	Dimethylhydrazine, unsymmetrical	10 (4.54kg)
	4, 6-Dinitro-o-cresol and salts	10 (4.54kg)
***	Dinitrogen tetroxide	10 (4.54kg)
	Dinitrophenol 2, 5-Dinitrophenol 2, 4-Dinitrophenol	10 (4.54kg)
	Dinitrotoluene 3, 4-Dinitrotoluene	10 (4.54kg)
	2, 4-Dinitrotoluene	10 (4.54kg)
	1, 2-Diphenylhydrazine	10 (4.54kg)
	Diphosphoric acid, tetraethyl ester	10 (4.54kg)
	Di-n-propylnitrosamine	10 (4.54kg)
	Disulfoton	1 (0.454 kg)
	Endosulfan	1(0.454 kg)
	alpha-Endosulfan	1 (0.454 kg)
	beta-Endosulfan	1 (0.454 kg)
	Endosulfan sulfate	1 (0.454 kg)
	Endrin	1 (0.454 kg)
	Endrin, & metabolites	1 (0.454 kg)
	Endrin aldehyde	1 (0.454 kg)
	Ethanamine, N-ethyl-N-nitroso-	1 (0.454 kg)
	Ethane, 1, 2-dibromo-	1 (0.454 kg)
	Ethane, 1, 1'-oxybis(2-chloro-	10 (4.54kg)
	Ethane, pentachloro-	10 (4.54kg)
	Ethanethioamide	10 (4.54kg)
	Ethanol, 2, 2'-(nitrosoimino)bis-	1 (0.454 kg)
	Ethene, chloro-	1 (0.454 kg)
	Ethion	10 (4.54kg)
	Ethyl cyanide	10 (4.54kg)
	Ethylene dibromide	1 (0.454 kg)

<b>Code</b>	<b>Hazardous Substance</b>	<b>Reportable Quantity (RQ)/ pounds (kilograms)</b>
	Ethylene oxide	10 (4.54kg)
	Ethylenethiourea	10 (4.54kg)
	Ethylenimine	1 (0.454 kg)
	Ethyl methanesulfonate	1 (0.454 kg)
	Fluorine	10 (4.54kg)
	Fluoroacetic acid, sodium salt	10 (4.54kg)
	Fulminic acid, mercury (2+) salt	10 (4.54kg)
	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	1 (0.454 kg)
	D-Glucose, 2-deoxy-2-[[methylnitrosoamino)-carbonyl]amino]-	1 (0.454 kg)
	Glycidylaldehyde	10 (4.54kg)
	Guanidine, N-methyl-N'-nitro-N-nitroso-	10 (4.54kg)
	Guthion	1 (0.454 kg)
	Heptachlor	1 (0.454 kg)
	Heptachlor epoxide	1 (0.454 kg)
	Hexachlorobenzene	10 (4.54kg)
	Hexachlorobutadiene	1 (0.454 kg)
	Hexachlorocyclohexane(gamma isomer)	1 (0.454 kg)
	Hexachlorocyclopentadiene	10 (4.54kg)
	1, 2, 3, 4, 10-10-Hexachloro-1, 4, 4a, 5, 8, 8a-hexahydro- 1,4:5,8-endo,exo-dimethanonaphthalene	1 (0.454 kg)
	Hexamethylphosphoramide	1 (0.454 kg)
	Hydrazine	1 (0.454 kg)
	Hydrazine, 1, 2-diethyl-	10 (4.54kg)
	Hydrazine, 1, 1-dimethyl-	10 (4.54kg)
	Hydrazine, 1, 2-dimethyl-	1 (0.454 kg)
	Hydrazine, 1, 2-diphenyl-	10 (4.54kg)
	Hydrazine, methyl-	10 (4.54kg)
	Hydrocyanic acid	10 (4.54kg)
	Hydrogen cyanide	10 (4.54kg)
	Hydroperoxide, 1-methyl-1-phenylethyl-	10 (4.54kg)
	2- Imidazolidinethione	10 (4.54kg)
	Isodrin	1 (0.454 kg)
	Keponedecachloroc-tahydro	1 (0.454 kg)
	Lasiocarpine	10 (4.54kg)
*	Lead	10 (4.54kg)
	Lead acetate	10 (4.54kg)
	Lead arsenate	1 (0.454 kg)
	Lead, bis (acetato-O) tetrahydroxytri	10 (4.54kg)
	Lead chloride	10 (4.54kg)
	Lead fluoborate	10 (4.54kg)
	Lead fluoride	10 (4.54kg)
	Lead iodide	10 (4.54kg)
	Lead nitrate	10 (4.54kg)

<b>Code</b>	<b>Hazardous Substance</b>	<b>Reportable Quantity (RQ)/ pounds (kilograms)</b>
	Lead phosphate	10 (4.54kg)
	Lead stearate	10 (4.54kg)
	Lead subacetate	10 (4.54kg)
	Lead sulfate	10 (4.54kg)
	Lead sulfide	10 (4.54kg)
	Lead thiocyanate	10 (4.54kg)
	Lindane	1 (0.454 kg)
	Lithium chromate	10 (4.54kg)
	Melphalan	1 (0.454 kg)
	Mercaptodimethur	10 (4.54kg)
	Mercuric cyanide	1 (0.454 kg)
	Mercuric nitrate	10 (4.54kg)
	Mercuric sulfate	10 (4.54kg)
	Mercuric thiocyanate	10 (4.54kg)
	Mercurous nitrate	10 (4.54kg)
	Mercury	1 (0.454 kg)
	Mercury fulminate	10 (4.54kg)
	Methanamine, N-methyl-N-nitroso	10 (4.54kg)
	Methane, chloromethoxy-	1 (0.454 kg)
	Methane, isocyanato-	10 (4.54kg)
	Methane, oxybis(chloro-	1 (0.454 kg)
	Methane, tetrachloro-	10 (4.54kg)
	Methane, tetranitro-	10 (4.54kg)
	Methane, trichloro-	10 (4.54kg)
	Methanesulfonic acid, ethyl ester	1 (0.454 kg)
	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide	1 (0.454 kg)
	4, 7-Methano-1H-indene, 1, 4, 5, 6, 7, 8, 8-heptachloro-a, 4,7, 7a-tetrahydro-	1 (0.454 kg)
	4, 7-Methano-1H-indene, 1, 4, 5, 6, 7, 8, 8-octachloro-2, 3, 3a, 4, 7, 7a-hexahydro	1 (0.454 kg)
	1, 3, 4-Metheno-2H-cyclobutal[cd]-pentalen-2-one,1, 1a, 3, 3a, 4,5, 5, 5a, 5b, 6-decachlorooctahydro-	1 (0.454 kg)
	Methoxychlor	1 (0.454 kg)
***	Methylchloromethyl ether	1 (0.454 kg)
	3-Methylcholanthrene	10 (4.54kg)
	4,4'-Methylenebis(2-chloroaniline)	10 (4.54kg)
	4,4'-Methylenedianiline	10 (4.54kg)
	Methyl ethyl ketone peroxide	10 (4.54kg)
	Methyl hydrazine	10 (4.54kg)
	Methyl isocyanate	1 (0.454 kg)
	2-Methylactonitrile	10 (4.54kg)
	Methylthiouracil	10 (4.54kg)

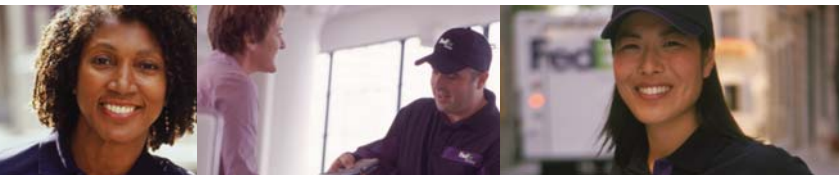
<b>Code</b>	<b>Hazardous Substance</b>	<b>Reportable Quantity (RQ)/ pounds (kilograms)</b>
	Mevinphos	10 (4.54kg)
	Mitomycin C	10 (4.54kg)
	MNNG	10 (4.54kg)
	Naled	10 (4.54kg)
	5,12-Naphthacenedione, 8-acetyl-10-[3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8 9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	10 (4.54kg)
	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt	10 (4.54kg)
	beta-Naphthylamine	1 (0.454 kg)
	2--Naphthylamine	1 (0.454 kg)
	Nickel carbonyl	10 (4.54kg)
	Nickel carbonyl Ni (CO) 4, (T-4)-	10 (4.54kg)
	Nickel cyanide	10 (4.54kg)
	Nickel cyanide Ni(CN) 2	10 (4.54kg)
	Nickel hydroxide	10 (4.54kg)
	Nitric oxide	10 (4.54kg)
	4-nitrobiphenyl	10 (4.54kg)
	Nitrogen dioxide	10 (4.54kg)
	Nitrogen oxide NO	10 (4.54kg)
	Nitrogen oxide NO2	10 (4.54kg)
	Nitroglycerine	10 (4.54kg)
	2-Nitropropane	10 (4.54kg)
	N-Nitrosodi-n-butylamie	10 (4.54kg)
	N-Nitrosodiethanolamine	1 (0.454 kg)
	N-Nitrosodiethylamine	1 (0.454 kg)
	N-Nitrosodimethylamine	10 (4.54kg)
	N-Nitroso-N-ethylurea	1 (0.454 kg)
	N-Nitroso-N-methylurea	1 (0.454 kg)
	N-Nitroso-N-methylurethane	1 (0.454 kg)
	N-Nitrosomethylvinylamine	10 (4.54kg)
	n-Nitrosomorpholine	1 (0.454 kg)
	N-Nitrosopiperidine	10 (4.54kg)
	N-Nitrosopyrrolidine	1 (0.454 kg)
	1,2-Oxathiolane,2,2-dioxide	10 (4.54kg)
	2H-1,3,2-Oxazaphosphorin-2-amine,N,N,-bis(2-chloroethyl)tetrahydro-,2-oxide	10 (4.54kg)
	Oxirane	10 (4.54kg)
	Oxiranecarboxyaldehyde	10 (4.54kg)
	Parathion	10 (4.54kg)
	Pentachlorobenzene	10 (4.54kg)
	Pentachloroethane	10 (4.54kg)

<b>Code</b>	<b>Hazardous Substance</b>	<b>Reportable Quantity (RQ)/ pounds (kilograms)</b>
	Pentachlorophenol	10 (4.54kg)
	Phenol,4,4'-(1,2-diethyl-1,2-ethenediyl)bis-,(E)	1 (0.454 kg)
	Phenol, 2, 4-dinitro-	10 (4.54kg)
	Phenol, 2-methyl-4, 6-dinitro-	10 (4.54kg)
	Phenol, pentachloro-	10 (4.54kg)
	Phenol, 2,3,4,6-tetrachloro-	10 (4.54kg)
	Phenol, 2,4,5-trichloro-	10 (4.54kg)
	Phenol, 2,4,6-trichloro-	10 (4.54kg)
	Phenol, 2,4,6-trinitro-, ammonium salt	10 (4.54kg)
	L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]	1 (0.454 kg)
	Phorate	10 (4.54kg)
	Phosgene	10 (4.54kg)
	Phosphoric acid, lead (2+) salt (2:3)	10 (4.54kg)
	Phosphorodithioic acid, O, O-diethyl S-[2-(ethylthio)ethyl]ester	1 (0.454 kg)
	Phosphorodithioic acid, O, O-diethyl S-ethylthio), methyl ester	10 (4.54kg)
	Phosphorodithioic acid, O, O-dimethyl S-[2-methylamino)-2-oxoethyl]ester	10 (4.54kg)
	Phosphorodithioic acid, O, O-diethyl O-(4-nitrophenyl)ester	10 (4.54kg)
	Phosphorus	1 (0.454 kg)
	Piperidine, 1-nitroso-	10 (4.54kg)
	Plumbane, tetraethyl-	10 (4.54kg)
	POLYCHLORINATED BIPHENYLS (PCBs)	1 (0.454 kg)
	Potassium arsenate	1 (0.454 kg)
	Potassium arsenite	1 (0.454 kg)
	Potassium bichromate	10 (4.54kg)
	Potassium chromate	10 (4.54kg)
	Potassium cyanide	10 (4.54kg)
	Potassium cyanide K(CN)	10 (4.54kg)
	Potassium silver cyanide	1 (0.454 kg)
	Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime	1 (0.454 kg)
	1-Propanamine, N-nitroso-N-propyl-	10 (4.54kg)
	Propane, 1, 2-dibromo-3-chloro-	1 (0.454 kg)
	Propane, 2-nitro-	10 (4.54kg)
	1,3-Propane sultone	10 (4.54kg)
	Propanenitrile	10 (4.54kg)
	Propanenitrile, 2-hydroxy-2-methyl-	10 (4.54kg)
	1,2,3-propanetriol, trinitrate-	10 (4.54kg)
	1-Propanol, 2,3-dibromo-,phosphate(3:1)	10 (4.54kg)
	Propargite	10 (4.54kg)
	2-Propenal	1 (0.454 kg)
	1,2-Propylenimine	1 (0.454 kg)
	Pyrethrins	1 (0.454 kg)



Code	Hazardous Substance	Reportable Quantity (RQ)/ pounds (kilograms)
	2,4-(1H,3H)- Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	
	4(1H)-Pyrimidinone,2,3-dihydro-6-methyl-2-thioxo	10 (4.54kg)
	Pyrrolidine, 1-nitroso-	1 (0.454 kg)
	Selenious acid	10 (4.54kg)
	Selenium dioxide	10 (4.54kg)
	Selenium oxide	10 (4.54kg)
	Selenium sulfide	10 (4.54kg)
	Selenium sulfide SeS2	10 (4.54kg)
	L-Serine, diazoacetate(ester)	1 (0.454 kg)
	Silver cyanide	1 (0.454 kg)
	Silver cyanide Ag(CN)	1 (0.454 kg)
	Silver nitrate	1 (0.454 kg)
	Sodium	10 (4.54kg)
	Sodium arsenate	1 (0.454 kg)
	Sodium arsenite	1 (0.454 kg)
	Sodium bichromate	10 (4.54kg)
	Sodium chromate	10 (4.54kg)
	Sodium cyanide	10 (4.54kg)
	Sodium cyanide Na(CN)	10 (4.54kg)
	Streptozotocin	1 (0.454 kg)
	Strontium chromate	10 (4.54kg)
	Strychnidin-10-one	10 (4.54kg)
	Strychnine and salts	10 (4.54kg)
	TDE	1 (0.454 kg)
	2,3,7,8-Tetrachlorodibenzo-p-dioxin(TCDD)	1 (0.454 kg)
	2,3,4,6-Tetrachlorophenol	10 (4.54kg)
	Tetraethyl lead	10 (4.54kg)
	Tetraethyl pyrophosphate	10 (4.54kg)
	Tetranitromethane	10 (4.54kg)
	Thioacetamide	10 (4.54kg)
	Thioperoxydicarbonic diamide[(H2N)C(S)]2S2, tetramethyl-	10 (4.54kg)
	Thiourea	10 (4.54kg)
	Thiram	10 (4.54kg)
	Toluenediamine	10 (4.54kg)
	Toxaphene	1 (0.454 kg)
	1H-1,2,4-Triazol-3-amine	10 (4.54kg)
	Trichlorophenol	10 (4.54kg)
	2,3,4-Trichlorophenol	
	2,3,5-Trichlorophenol	
	2,3,6-Trichlorophenol	
	2,4,5-Trichlorophenol	
	2,4,6-Trichlorophenol	
	3,4,5-Trichlorophenol	

<b>Code</b>	<b>Hazardous Substance</b>	<b>Reportable Quantity (RQ)/ pounds (kilograms)</b>
	2,4,5-Trichlorophenol	10 (4.54kg)
	2,4,6-Trichlorophenol	10 (4.54kg)
	Trifluralin	10 (4.54kg)
	1,3,5-Trinitrobenzene	10 (4.54kg)
	Tris(2,3-dibromopropyl)phosphate	10 (4.54kg)
	Trypan blue	10 (4.54kg)
	Uracil mustard	10 (4.54kg)
	Urea, N-ethyl-N-nitroso-	1 (0.454 kg)
	Urea, N-methyl-N-nitroso-	1 (0.454 kg)
	Vinylamine, N-methyl-N-nitroso-	10 (4.54kg)
	Vinyl chloride	1 (0.454 kg)
	Zinc cyanide	10 (4.54kg)
	Zinc cyanide Zn(CN) <sub>2</sub>	10 (4.54kg)



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