CHAPTER 8

CFR 49 - PART 172

HAZARDOUS MATERIALS TABLE

(LABELING)
(PLACARDING)

NOTES

Part 172—HAZARDOUS MATERIALS TABLE, SPECIAL PROVISIONS, HAZARDOUS MATERIALS COMMUNICATIONS, EMERGENCY RESPONSE INFORMATION, AND TRAINING REQUIREMENTS

Subpart A—General

Sec.
172.1 Purpose and scope.
172.3 Applicability.

Subpart B—Table of Hazardous Materials and Special Provisions

172.101 Purpose and use of hazardous materials table.
172.102 Special provisions.

Subpart C—Shipping Papers

172.200 Applicability.
172.201 General entries.
172.202 Description of hazardous material on shipping papers.
172.203 Additional description requirements.
172.204 Shipper's certification.
172.205 Hazardous waste manifest.

Subpart D—Marking

172.300 Applicability.
172.301 General marking requirements for non-bulk packagings.
172.302 General marking requirements for bulk packagings.
172.303 Prohibited marking.
172.304 Marking requirements.
172.306 [Reserved]
172.308 Authorized abbreviations.
172.310 Class 7 (radioactive) materials.
172.312 Liquid hazardous materials in non-bulk packagings.
172.313 Poisonous hazardous materials.
172.316 Packagings containing materials classed as ORM-D.
172.320 Explosive hazardous materials.
172.322 Marine pollutants.
172.324 Hazardous substances in non-bulk packagings.
172.325 Elevated temperature materials.
172.326 Portable tanks.
172.328 Cargo tanks.
172.330 Tank cars and multi-unit tank car tanks.
172.331 Bulk packagings other than portable tanks, cargo tanks, tank cars and multi-unit tank car tanks.
172.332 Identification number markings.
172.334 Identification numbers; prohibited display.
172.336 Identification numbers; special provisions.
172.338 Replacement of identification numbers.

Subpart E—Labeling

172.400 General labeling requirements.
172.400a Exceptions from labeling.
172.401 Prohibited labeling.
172.402 Additional labeling requirements.
172.403 Class 7 (radioactive) material.
172.404 Labels for mixed and consolidated packaging.
172.405 Authorized label modifications.
172.406 Placement of labels.
172.407 Label specifications.
172.411 EXPLOSIVE 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 labels, and EXPLOSIVE Subsidiary label.
172.415 NON-FLAMMABLE GAS Label.
172.416 POISON GAS label.
172.417 FLAMMABLE GAS label.
172.419 FLAMMABLE LIQUID label.
172.420 FLAMMABLE SOLID label.
172.422 SPONTANEOUSLY COMBUSTIBLE label.
172.423 DANGEROUS WHEN WET label.
172.426 OXIDIZER label.
172.427 ORGANIC PEROXIDE label.
172.429 POISON INHALATION HAZARD label.
172.430 POISON label.
172.431 KEEP AWAY FROM FOOD label.
172.432 INFECTIOUS SUBSTANCE label.
172.436 RADIOACTIVE WHITE-I label.
172.438 RADIOACTIVE YELLOW-II label.
172.440 RADIOACTIVE YELLOW-III label.
172.442 CORROSIVE label.
172.444 [Reserved]
172.446 CLASS 9 label.
172.448 CARGO AIRCRAFT ONLY label.
172.450 EMPTY label.

Subpart F—Placarding

172.500 Applicability of placarding requirements.
172.502 Prohibited and permissive placarding.
172.503 Identification number display on placards.
172.504 General placarding requirements.
172.505 Placarding for subsidiary hazards.
172.506 Providing and affixing placards: Highway.
172.507 Special placarding provisions: Highway.
172.508 Placarding and affixing placards: Rail.
172.510 Special placarding provisions: Rail.

172.512 Freight containers and aircraft unit load devices.
172.514 Bulk packagings.
172.516 Visibility and display of placards.
172.519 General specifications for placards.
172.521 DANGEROUS placard.
172.522 EXPLOSIVES 1.1, EXPLOSIVES 1.2 and EXPLOSIVES 1.3 placards.
172.523 EXPLOSIVES 1.4 placard.
172.524 EXPLOSIVES 1.5 placard.
172.525 EXPLOSIVES 1.6 placard.
172.526 [Reserved]
172.527 Background requirements for certain placards.
172.528 NON-FLAMMABLE GAS placard.
172.530 OXYGEN placard.
172.532 FLAMMABLE GAS placard.
172.536 [Reserved]
172.540 POISON GAS placard.
172.542 FLAMMABLE placard.
172.544 COMBUSTIBLE placard.
172.546 FLAMMABLE SOLID placard.
172.547 SPONTANEOUSLY COMBUSTIBLE placard.
172.548 DANGEROUS WHEN WET placard.
172.550 OXIDIZER placard.
172.552 ORGANIC PEROXIDE placard.
172.553 KEEP AWAY FROM FOOD placard.
172.554 POISON placard.
172.555 POISON INHALATION HAZARD placard.
172.556 RADIOACTIVE placard.
172.558 CORROSIVE placard.
172.560 CLASS 9 placard.

Subpart G—Emergency Response Information

172.600 Applicability and general requirements.
172.602 Emergency response information.
172.604 Emergency response telephone number.
172.606 Carrier information contact.

Subpart H—Training

172.700 Purpose and scope.
172.701 Federal-State relationship.
172.702 Applicability and responsibility for training and testing.
172.704 Training requirements.

Subpart I—[Removed]

APPENDIX A TO PART 172—OFFICE OF HAZARDOUS MATERIALS TRANSPORTATION COLOR TOLERANCE CHARTS AND TABLES
APPENDIX B TO PART 172—TREFOIL SYMBOL
APPENDIX C TO PART 172—DIMENSIONAL SPECIFICATIONS FOR RECOMMENDED PLACARD HOLDER

AUTHORITY: 49 U.S.C. 5101-5127; 49 CFR 1.53.

SOURCE: Amdt. 172-29, 41 FR 15996, Apr. 15, 1976, unless otherwise noted.

Subpart A—General

§172.1 Purpose and scope.

This part lists and classifies those materials which the Department of Transportation has designated as hazardous materials for purposes of transportation and prescribes the requirements for shipping papers, package marking, labeling, and transport vehicle placarding applicable to the shipment and transportation of those hazardous materials.

[Amdt. 172-29, 41 FR 15997, Apr. 15, 1976]

§172.3 Applicability.

(a) This part applies to

(1) Each person who offers a hazardous material for transportation, and

(2) Each carrier by air, highway, rail, or water who transports a hazardous material.

(b) When a person, other than one of those provided for in paragraph (a) of this section, performs a packaging labeling or marking function required by this part, that person shall perform the function in accordance with this part.

[Amdt. 172-29, 41 FR 15996, Apr. 15, 1976, as amended by Amdt. 172-32, 41 FR 38179, Sept. 9, 1976]

Subpart B—Table of Hazardous Materials and Special Provisions

§172.101 Purpose and use of hazardous materials table.

(a) The Hazardous Materials Table (Table) in this section designates the materials listed therein as hazardous materials for the purpose of transportation of those materials. 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 proper shipping name. In addition, the Table specifies or references requirements in this subchapter pertaining to

labeling, packaging, quantity limits aboard aircraft and stowage of hazardous materials aboard vessels.

(b) *Column 1: Symbols.* Column 1 of the Table contains five symbols ("+", "A", "D", "I", and "W"), as follows:

(1) The plus (+) 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 or packing group or meets any other hazard class definition. An appropriate alternate proper shipping name and hazard class may be authorized by the Associate Administrator for Hazardous Materials Safety.

(2) The letter "A" restricts the application of requirements of this subchapter to materials offered or intended for transportation by aircraft, unless the material is a hazardous substance or a hazardous waste.

(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 "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.

(5) The letter "W" restricts the application of requirements of this subchapter to materials offered or intended for transportation by vessel, unless the material is a hazardous substance or a hazardous waste.

(c) *Column 2: Hazardous materials descriptions and proper shipping names.* Column 2 lists the hazardous materials descriptions and proper shipping names of materials designated as hazardous materials. Modification of a proper shipping name may otherwise be required or authorized by this section. Proper shipping names are limited to those shown in Roman type (not italics).

(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".

(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.

(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 (e.g., Ethyl alcohol, *see* Ethanol).

(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) *Hazardous substances.* Appendix A to this section lists materials which are listed or

designated as hazardous substances under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Proper shipping names for hazardous substances (see Appendix A to this section and § 171.8 of this subchapter) shall be determined as follows:

(i) If the hazardous substance appears in the Table by technical name, then the technical name is the proper shipping name.

(ii) If the hazardous substance does not appear in the Table and is not a forbidden material, then an appropriate generic, or "n.o.s.", shipping name shall be selected corresponding to the hazard class (and packing group, if any) of the material as determined by the defining criteria of this subchapter (see §§ 173.2 and 173.2a of this subchapter). For example, a hazardous substance which is listed in Appendix A but not in the Table and which meets the definition of a flammable liquid might be described as "Flammable liquid, n.o.s." or other appropriate shipping name corresponding to the flammable liquid hazard class.

(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 § 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 § 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 § 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 §§ 173.21, 173.51, 173.56(d), 173.56(e)(1), 173.124(a)(2)(iii) or 173.128(c) of this subchapter, a material for which the hazard class is uncertain and must be determined by testing or a material that is a hazardous waste may be assigned a tentative shipping name, hazard class, identification number, and packing group, based on the shipper's tentative determination according to–

(i) Defining criteria in this subchapter;

(ii) The hazard precedence prescribed in § 173.2a of this subchapter; and

(iii) The shipper's knowledge of the 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 § 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) Hydrates of inorganic substances may be identified using the proper shipping name for the equivalent anhydrous substance if the hydrate meets the same hazard class or division, subsidiary risk(s) and packing group, unless the hydrate is specifically identified in the Table.

(d) *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 for Hazardous Materials Safety.

(3) A basic description of each hazard class and the section reference for class definitions appear in § 173.2 of this subchapter.

(4) Each reference to a Class 3 material is modified to read "Combustible liquid" when that material is reclassified in accordance with § 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).

(e) *Column 4: 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.

(f) *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 for Hazardous Materials Safety. 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.

(g) *Column 6: Labels.* 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 § 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 reclassed as a combustible liquid. The codes contained in Column 6 are defined according to the following table:

Label Substitution Table

Label code	Label name
1	Explosive.
1.1[1]	Explosive 1.11.
1.2[1]	Explosive 1.2.1
1.3[1]	Explosive 1.3.1
1.4[1]	Explosive 1.4.1
1.5[1]	Explosive 1.5.1
1.6[1]	Explosive 1.6.1
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 (inhalation hazard, Zone A or B).	Poison Inhalation Hazard.
6.1 (I or II, other than Zone A or B inhalation hazard)[2].	Poison.
6.1 (III)[2]	Keep Away From Food.
6.2	Infectious Substance.
7	Radioactive.
8	Corrosive.

Label code	Label name
9	Class 9.

[1] Refers to the appropriate compatibility group letter.
[2] The packing group for a material is indicated in column 5 of the table.

(h) *Column 7: Special provisions.* Column 7 specifies codes for special provisions applicable to hazardous materials. When Column 7 refers to a special provision for a hazardous material, the meaning and requirements of that special provision are as set forth in § 172.102 of this subpart.

(i) *Column 8: Packaging authorizations.* Columns 8A, 8B and 8C specify the applicable sections for exceptions, non-bulk packaging requirements and bulk packaging requirements, respectively, in part 173 of this subchapter. Columns 8A, 8B and 8C are completed in a manner which indicates that "§ 173." precedes the designated numerical entry. For example, the entry "202" in Column 8B associated with the proper shipping name "Gasoline" indicates that for this material conformance to non-bulk packaging requirements prescribed in § 173.202 of this subchapter is required. When packaging requirements are specified, they are in addition to the standard requirements for all packagings prescribed in § 173.24 of this subchapter and any other applicable requirements in subparts A and B of part 173 of this subchapter.

(1) Exceptions. Column 8A contains exceptions from some of the requirements of this subchapter. The referenced exceptions are in addition to those specified in subpart A of part 173 and elsewhere in this subchapter. A "None" in this column means no packaging exceptions are authorized, except as may be provided by special provisions in Column 7.

(2) Non-bulk packaging. Column 8B references the section in part 173 of this subchapter which prescribes packaging requirements for non-bulk packagings. A "None" in this column means non-bulk packagings are not authorized, except as may be provided by special provisions in Column 7. 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 include "§ 173.203" or "§ 173.213", as appropriate for liquids and solids, respectively, on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter.

(3) Bulk packaging. Column 8C specifies the section in part 173 of this subchapter which prescribes packaging requirements for bulk packagings, subject to the limitations, requirements and additional authorizations of Column 7. A "None" in this column means bulk packagings are not authorized, except as may be provided by special provisions in Column 7. Additional authorizations and limitations for use of IM portable tanks are set forth in Column 7. For 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" and which is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter:

(i) The column reference is § 173.240 or § 173.241, as appropriate.

(ii) For a solid material, the exception provided in Special provision B54 is applicable.

(iii) For a Class 9 material which meets the definition of an elevated temperature material, the column reference is § 173.247.

(4) For a hazardous material which is specifically named in the Table and whose packaging sections specify packagings not applicable to the form of the material (e.g., packaging specified is for solid material and the material is being offered for transportation in a liquid form) the following table should be used to determine the appropriate packaging section:

Packaging section reference for solid materials	Corresponding packaging section for liquid materials
§173.187	173.181
§173.211	173.201
§173.212	173.202

Label code	Label name
9	Class 9.

[1] Refers to the appropriate compatibility group letter.
[2] The packing group for a material is indicated in column 5 of the table.

(h) *Column 7: Special provisions.* Column 7 specifies codes for special provisions applicable to hazardous materials. When Column 7 refers to a special provision for a hazardous material, the meaning and requirements of that special provision are as set forth in § 172.102 of this subpart.

(i) *Column 8: Packaging authorizations.* Columns 8A, 8B and 8C specify the applicable sections for exceptions, non-bulk packaging requirements and bulk packaging requirements, respectively, in part 173 of this subchapter. Columns 8A, 8B and 8C are completed in a manner which indicates that "§ 173." precedes the designated numerical entry. For example, the entry "202" in Column 8B associated with the proper shipping name "Gasoline" indicates that for this material conformance to non-bulk packaging requirements prescribed in § 173.202 of this subchapter is required. When packaging requirements are specified, they are in addition to the standard requirements for all packagings prescribed in § 173.24 of this subchapter and any other applicable requirements in subparts A and B of part 173 of this subchapter.

(1) Exceptions. Column 8A contains exceptions from some of the requirements of this subchapter. The referenced exceptions are in addition to those specified in subpart A of part 173 and elsewhere in this subchapter. A "None" in this column means no packaging exceptions are authorized, except as may be provided by special provisions in Column 7.

(2) Non-bulk packaging. Column 8B references the section in part 173 of this subchapter which prescribes packaging requirements for non-bulk packagings. A "None" in this column means non-bulk packagings are not authorized, except as may be provided by special provisions in Column 7. 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 include "§ 173.203" or "§ 173.213", as appropriate for liquids and solids, respectively, on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter.

(3) Bulk packaging. Column 8C specifies the section in part 173 of this subchapter which prescribes packaging requirements for bulk packagings, subject to the limitations, requirements and additional authorizations of Column 7. A "None" in this column means bulk packagings are not authorized, except as may be provided by special provisions in Column 7. Additional authorizations and limitations for use of IM portable tanks are set forth in Column 7. For 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" and which is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter:

(i) The column reference is § 173.240 or § 173.241, as appropriate.

(ii) For a solid material, the exception provided in Special provision B54 is applicable.

(iii) For a Class 9 material which meets the definition of an elevated temperature material, the column reference is § 173.247.

(4) For a hazardous material which is specifically named in the Table and whose packaging sections specify packagings not applicable to the form of the material (e.g., packaging specified is for solid material and the material is being offered for transportation in a liquid form) the following table should be used to determine the appropriate packaging section:

Packaging section reference for solid materials	Corresponding packaging section for liquid materials
§173.187	173.181
§173.211	173.201
§173.212	173.202

proval from the Associate Administrator for Hazardous Materials Safety.

(3) The proper shipping name of a hazardous material changed in the May 6, 1997 final rule, in effect on October 1, 1997, only by the addition or omission of the word "compressed," "inhibited," "liquefied" or "solution" may continue to be used to comply with package marking requirements, until January 1, 2003.

[62 FR 24689, May 6, 1997; 62 FR 39404, July 22, 1997]

§172.101 HAZARDOUS MATERIALS TABLE

(1) Sym-bols	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	Other (10B)
	Accellerene, see p-Nitrosodimethylaniliine.	.....	.....		.....		.....	.....	.....	.....	.....		
	Accumulators, electric, see Batteries, wet *etc.*	.....	.....		.....		.....	.....	.....	.....	.....		
D	Accumulators, pressurized, pneumatic *or* hydraulic *(containing non-flammable gas).*	2.2	NA1956		2.2		306	306	None	No limit	No limit	A	
	Acetal	3	UN1088	II	3	T7	150	202	242	5 L	60 L	E	
	Acetaldehyde	3	UN1089	I	3	A3,B16,T20, T26,T29	None	201	243	Forbidden	30 L	E	
A	Acetaldehyde ammonia	9	UN1841	III	9		155	204	240	200 kg	200 kg	A	34
	Acetaldehyde oxime	3	UN2332	III	3	B1,T8	150	203	242	60 L	220 L	A	
	Acetic acid solution, *with more than 10 percent but not more than 80 percent acid, by mass.*	8	UN2790	II	8	A3,A6,A7,A10, B2,T8	154	202	242	1 L	30 L	A	
	Acetic acid, glacial *or* Acetic acid solution, *with more than 80 percent acid, by mass.*	8	UN2789	II	8, 3	A3,A6,A7,A10, B2,T8	154	202	243	1 L	30 L	A	
	Acetic anhydride	8	UN1715	II	8, 3	A3,A6,A7,A10, B2,T8	154	202	243	1 L	30 L	A	40
	Acetone	3	UN1090	II	3	T8	150	202	242	5 L	60 L	B	
	Acetone cyanohydrin, stabilized	6.1	UN1541	I	6.1	2,A3,B9,B14, B32,B76,B77, N34,T38,T43, T45	None	227	244	Forbidden	30 L	D	25, 40, 49
	Acetone oils	3	UN1091	II	3	T7,T30	150	202	242	5 L	60 L	B	
	Acetonitrile	3	UN1648	II	3	T14	150	202	242	1 L	60 L	B	40
	Acetyl acetone peroxide with more than 9 percent by mass active oxygen.	Forbidden					.....	.....	.....	.....	.....		

Acetyl benzoyl peroxide, solid, or with more than 40 percent in solution.	Forbidden													
Acetyl bromide	8	UN1716	II	8		B2,T12,T26	154	202	242	1 L		30 L	C	40
Acetyl chloride	3	UN1717	II	3, 8		A3,A6,A7,B100, N34,T18,T26	None	202	243	1 L		5 L	B	40
Acetyl cyclohexanesulfonyl peroxide, with more than 82 percent wetted with less than 12 percent water	Forbidden													
Acetyl iodide	8	UN1898	II	8		B2,B101,T9	154	202	242	1 L		30 L	C	40
Acetyl methyl carbinol	3	UN2621	III	3		B1,T1	150	203	242	60 L		220 L	A	
Acetyl peroxide, solid, or with more than 25 percent in solution	Forbidden													
Acetylene (liquefied)	Forbidden													
Acetylene silver nitrate	Forbidden													
Acetylene tetrabromide, see Tetrabromoethane														
Acetylene, dissolved	2.1	UN1001		2.1			None	303	None	Forbidden		15 kg	D	25, 40, 57
Acid butyl phosphate, see Butyl acid phosphate														
Acid, sludge, *see* Sludge acid														
Acridine	6.1	UN2713	III	6.1			153	213	240	100 kg		200 kg	A	
Acrolein dimer, stabilized	3	UN2607	III	3		B1,T1	150	203	242	60 L		220 L	A	40
Acrolein, inhibited	6.1	UN1092	I	6.1, 3		1,B9,B12,B14, B30,B42,B72, B77,T38,T43, T44	None	226	244	Forbidden		Forbidden	D	40
Acrylamide	6.1	UN2074	III	6.1		T8	153	213	240	100 kg		200 kg	A	12
Acrylic acid, inhibited	8	UN2218	II	8, 3		B2,T8	154	202	243	1 L		30 L	C	25, 40
Acrylonitrile, inhibited	3	UN1093	I	3, 6.1		B9,T18,T26	None	201	243	Forbidden		30 L	E	40
Actuating cartridge, explosive, see Cartridges, power device														
Adhesives, *containing a flammable liquid*	3	UN1133	I	3		B42,T7,T30	150	201	243	1 L		30 L	B	
Adhesives, *containing a flammable liquid*	3	UN1133	II	3		B52,T7,T30	150	173	242	5 L		60 L	B	

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols (1)	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Adhesives, *containing a flammable liquid*	3	UN1133	III	3	B1,B52,T7,T30	150	173	242	60 L	220 L	A	
	Adiponitrile	6.1	UN2205	III	6.1	T1	153	203	241	60 L	220 L	A	
	Aerosols, *corrosive, Packing Group II or III, (each not exceeding 1 L capacity)*	2.2	UN1950		2.2, 8	A34	306	None	None	75 kg	150 kg	A	40, 48, 85
	Aerosols, *flammable, (each not exceeding 1 L capacity)*	2.1	UN1950		2.1	N82	306	None	None	75 kg	150 kg	A	40, 48, 85
	Aerosols, *non-flammable, (each not exceeding 1 L capacity)*	2.2	UN1950		2.2		306, 307	None	None	75 kg	150 kg	A	48, 85
	Aerosols, *poison, each not exceeding 1 L capacity*	2.2	UN1950		2.2		306	None	None	Forbidden	Forbidden	A	40, 48, 85
	Aerosols, flammable, n.o.s. *(engine starting fluid) (each not exceeding 1 L capacity)*	2.1	UN1950		2.1	N82	306	None	None	Forbidden	Forbidden	A	40, 48, 85
	Air bag inflators *or* Air bag modules *or* Seat-belt pre-tensioners	9	UN3268	III	9		166	166	166	25 kg	100 kg	A	
	Air, compressed	2.2	UN1002		2.2		306	302	302	75 kg	150 kg	A	51
	Air, refrigerated liquid, *(cryogenic liquid) non-pressurized*	2.2	UN1003		2.2, 5.1		320	316	318, 319	Forbidden	Forbidden	D	
	Air, refrigerated liquid, *(cryogenic liquid)*	2.2	UN1003		2.2, 5.1		320	316	318, 319	Forbidden	150 kg	D	51
	Aircraft evacuation slides, see Life saving appliances *etc.*												
	Aircraft hydraulic power unit fuel tank *(containing a mixture of anhydrous hydrazine and monomethyl hydrazine) (M86 fuel)*	3	UN3165	I	3, 6.1, 8		None	172	None	Forbidden	42 L	E	

	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*	1.1D	UN0222	II	1.1D.		None	62	None	Forbidden	Forbidden	B	1E,5E, 19E
		5.1	UN1942	III	5.1	A1,A29	152	213	240	25 kg	100 kg	A	48, 59, 60, 116
	Ammonium nitrate, *with not more than 0.2 percent of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance*	5.1	UN2426		5.1	B5,B100,T25	None	None	243	Forbidden	Forbidden	D	59, 60
D	Ammonium nitrate, liquid *(hot concentrated solution)*	1.5D	NA0331	II	1.5D.		None	62	None	Forbidden	Forbidden	B	1E,5E
	Ammonium nitrate-fuel oil mixture *containing only prilled ammonium nitrate and fuel oil*	Forbidden											
	Ammonium nitrite	Forbidden											
	Ammonium perchlorate	1.1D	UN0402	II	1.1D.	107	None	62	None	Forbidden	Forbidden	B	1E,5E, 19E
	Ammonium perchlorate	5.1	UN1442	II	5.1	107,A9	152	212	242	5 kg	25 kg	E	58, 69, 106
	Ammonium permanganate	Forbidden											
	Ammonium persulfate	5.1	UN1444	III	5.1	A1,A29	152	213	240	25 kg	100 kg	A	1E,5E, 19E
	Ammonium picrate, *dry or wetted with less than 10 percent water, by mass*	1.1D	UN0004	II	1.1D		None	62	None	Forbidden	Forbidden	B	28, 36
	Ammonium picrate, wetted *with not less than 10 percent water, by mass*	4.1	UN1310	I	4.1	23,A2,N41	None	211	None	0.5 kg	0.5 kg	D	12, 26, 40
	Ammonium polysulfide, solution	8	UN2818	II	8, 6.1	T14	None	202	243	1 L	30 L	B	12, 26, 40
	Ammonium polysulfide, solution	8	UN2818	III	8, 6.1	T7	154	203	241	5 L	60 L	B	
	Ammonium polyvanadate	6.1	UN2861	II	6.1		None	212	242	25 kg	100 kg	A	
	Ammonium silicofluoride, see Ammonium fluorosilicate												

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class of division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Ammonium sulfide solution	8	UN2683	II	8, 6.1, 3	T14	None	202	243	1 L	30 L	B	12, 22, 26, 100
	Ammunition smoke, white phosphorus *with burster, expelling charge, or propelling charge.*	1.2H	UN0245	II	1.2H			62	None	Forbidden	Forbidden	E	8E, 14E, 15E, 17E
	Ammunition, blank, see Cartridges for weapons, blank.												
	Ammunition, illuminating *with or without burster, expelling charge or propelling charge.*	1.2G	UN0171	II	1.2G			62	None	Forbidden	Forbidden	B	
	Ammunition, illuminating *with or without burster, expelling charge or propelling charge.*	1.3G	UN0254	II	1.3G			62	None	Forbidden	Forbidden	B	
	Ammunition, illuminating *with or without burster, expelling charge or propelling charge.*	1.4G	UN0297	II	1.4G			62	None	Forbidden	75 kg	A	24E
	Ammunition, incendiary (water-activated contrivances) with burster, expelling charge or propelling charge, see Contrivances, water-activated, etc.												
	Ammunition, incendiary *liquid or gel, with burster, expelling charge or propelling charge.*	1.3J	UN0247	II	1.3J			62	None	Forbidden	Forbidden	E	7E, 13E, 23E
	Ammunition, incendiary *with or without burster, expelling charge or propelling charge.*	1.4G	UN0300	II	1.4G			62	None	Forbidden	75 kg	A	24E
	Ammunition, incendiary *with or without burster, expelling charge, or propelling charge.*	1.2G	UN0009	II	1.2G			62	None	Forbidden	Forbidden	B	

Ammunition, incendiary *with or without burster, expelling charge, or propelling charge.*	1.3G	UN0010	II	1.3G.	.....	62	None.	Forbidden	Forbidden	B		8E,14 E,15E, 17E
Ammunition, incendiary, white phosphorus, *with burster, expelling charge or propelling charge.*	1.2H	UN0243	II	1.2H.	.....	62	None.	Forbidden	Forbidden	E		8E,14 E,15E, 17E
Ammunition, incendiary, white phosphorus, *with burster, expelling charge or propelling charge.*	1.3H	UN0244	II	1.3H.	.....	62	None.	Forbidden	Forbidden	E		24E
Ammunition, practice	1.4G	UN0362	II	1.4G.	.....	62	None.	Forbidden	75 kg	A		
Ammunition, practice	1.3G	UN0488	II	1.3G.	.....	62	None.	Forbidden	Forbidden	B		
Ammunition, proof	1.4G	UN0363	II	1.4G.	.....	62	None.	Forbidden	75 kg	A		24E
Ammunition, rocket, see Warheads, rocket *etc.*	.....			.....	.....	.....	.....	.....	.....			
Ammunition, SA (small arms), see Cartridges for weapons, *etc.*	.....			.....	.....	.....	.....	.....	.....			
Ammunition, smoke (water-activated contrivances), white phosphorus, with burster, expelling charge or propelling charge, see Contrivances, water-activated, *etc. (UN 0248).*	.....			.....	.....	.....	.....	.....	.....			
Ammunition, smoke (water-activated contrivances), without white phosphorus or phosphides, with burster, expelling charge or propelling charge, see Contrivances, water-activated, *etc. (UN 0249).*	1.4G	UN0303	II	1.4G, 8.....	.....	62	None.	Forbidden	75 kg	E		17E,2 0E
Ammunition, smoke *with or without burster, expelling charge or propelling charge.*	1.3G	UN0016	II	1.3G, 8.....	.....	62	None.	Forbidden	Forbidden	E		17E,2 0E
Ammunition, smoke *with or without burster, expelling charge or propelling charge.*	1.2G	UN0015	II	1.2G, 8.....	.....	62	None.	Forbidden	Forbidden	E		17E,2 0E
Ammunition, smoke, white phosphorus *with burster, expelling charge, or propelling charge.*	1.3H	UN0246	II	1.3H.	.....	62	None.	Forbidden	Forbidden	E		8E,14 E,15E, 17E

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Ammunition, sporting, see Cartridges for weapons, *etc. (UN 0012; UN 0328; UN 0339).*	.....	.....		.....		.....	.....	.....	.....	.....		
	Ammunition, tear-producing *with burster, expelling charge or propelling charge.*	1.2G	UN0018	II	1.2G, 8, 6.1		.....	62	None..	Forbidden	Forbidden	E	20E
	Ammunition, tear-producing *with burster, expelling charge or propelling charge.*	1.3G	UN0019	II	1.3G, 8, 6.1		.....	62	None..	Forbidden	Forbidden	E	17E,2 0E
	Ammunition, tear-producing *with burster, expelling charge or propelling charge.*	1.4G	UN0301	II	1.4G, 8, 6.1		.....	62	None..	Forbidden	75 kg	E	17E,2 0E
	Ammunition, tear-producing, non-explosive, *without burster or expelling charge, non-fuzed.*	6.1	UN2017	II	6.1, 8		None..	212	None..	Forbidden	50 kg	E	13, 40
	Ammunition, toxic (water-activated contrivances), with burster, expelling charge or propelling charge, see Contrivances, water-activated, *etc.*	.....	.....		.....		.....	.....	.....	.....	.....		
	Ammunition, toxic *with burster, expelling charge, or propelling charge.*	1.3K	UN0021	II	1.3K, 6.1....		.....	62	None..	Forbidden	Forbidden	E	2E,8E, 11E,1 7E
	Ammunition, toxic *with burster, expelling charge, or propelling charge.*	1.2K	UN0020	II	1.2K, 6.1....		.....	62	None..	Forbidden	Forbidden	E	2E,8E, 11E,1 7E
	Ammunition, toxic, non-explosive, *without burster or expelling charge, non-fuzed.*	6.1	UN2016	II	6.1....		None..	212	None..	Forbidden	100 kg	E	13, 40
	Amyl acetates	3	UN1104	III	3.....	B1,T1	150....	203	242	60 L	220 L	A	
	Amyl acid phosphate	8	UN2819	III	8.....	T7	154....	203	241	5 L	60 L	A	

Arsine	2.3	UN2188		2.3, 2.1	1	None	192	245	Forbidden	Forbidden	D	40		
Articles, explosive, extremely insensitive *or* Articles, EEI.	1.6N	UN0486	II	1.6N	101	None	62	None	Forbidden	Forbidden	B			
Articles, explosive, n.o.s.	1.1E	UN0464	II	1.1E	101	None	62	None	Forbidden	Forbidden	B	24E		
Articles, explosive, n.o.s.	1.4E	UN0471	II	1.4E	101	None	62	None	Forbidden	75 kg	A			
Articles, explosive, n.o.s.	1.3C	UN0470	II	1.3C	101	None	62	None	Forbidden	Forbidden	B			
Articles, explosive, n.o.s.	1.2F	UN0469	II	1.2F	101	None	62	None	Forbidden	Forbidden	E			
Articles, explosive, n.o.s.	1.2E	UN0468	II	1.2E	101	None	62	None	Forbidden	Forbidden	B			
Articles, explosive, n.o.s.	1.2D	UN0467	II	1.2D	101	None	62	None	Forbidden	Forbidden	B			
Articles, explosive, n.o.s.	1.2C	UN0466	II	1.2C	101	None	62	None	Forbidden	Forbidden	B			
Articles, explosive, n.o.s.	1.2L	UN0355	II	1.2L	101	None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E		
Articles, explosive, n.o.s.	1.1F	UN0465	II	1.1F	101	None	62	None	Forbidden	Forbidden	E			
Articles, explosive, n.o.s.	1.4F	UN0472	II	1.4F	101	None	62	None	Forbidden	Forbidden	E			
Articles, explosive, n.o.s.	1.3L	UN0356	II	1.3L	101	None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E		
Articles, explosive, n.o.s.	1.1L	UN0354	II	1.1L	101	None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E		
Articles, explosive, n.o.s.	1.4G	UN0353	II	1.4G	101	None	62	None	Forbidden	Forbidden	A	24E		
Articles, explosive, n.o.s.	1.4D	UN0352	II	1.4D	101	None	62	None	Forbidden	Forbidden	A	24E		
Articles, explosive, n.o.s.	1.4C	UN0351	II	1.4C	101	None	62	None	Forbidden	Forbidden	A	24E		
Articles, explosive, n.o.s.	1.4B	UN0350	II	1.4B	101	None	62	None	Forbidden	Forbidden	A	24E		
Articles, explosive, n.o.s.	1.4S	UN0349	II	1.4S	101	None	62	None	Forbidden	100 kg	A			
Articles, explosive, n.o.s.	1.1C	UN0462	II	1.1C	101	None	62	None	Forbidden	Forbidden	B			
Articles, explosive, n.o.s.	1.1D	UN0463	II	1.1D	101	None	62	None	Forbidden	Forbidden	B			
Articles, pressurized pneumatic *or* Hydraulic *containing non-flammable gas.*	2.2	UN3164		2.2		306	302, 304	None	No limit	No limit	A			
Articles, pyrophoric	1.2L	UN0380	II	1.2L		None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E		
Articles, pyrotechnic *for technical purposes.*	1.2G	UN0429	II	1.2G		None	62	None	Forbidden	Forbidden	B			

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Articles, pyrotechnic *for technical purposes.*	1.3G	UN0430	II	1.3G		None	62	None	Forbidden	Forbidden	B	
	Articles, pyrotechnic *for technical purposes.*	1.4G	UN0431	II	1.4G		None	62	None	Forbidden	75 kg	A	24E
	Articles, pyrotechnic *for technical purposes.*	1.4S	UN0432	II	1.4S		None	62	None	25 kg	100 kg	A	
	Articles, pyrotechnic *for technical purposes.*	1.1G	UN0428	II	1.1G		None	62	None	Forbidden	Forbidden	B	
D	Asbestos	9	NA2212	III	9		155	216	240	200 kg	200 kg	A	34, 40
	Ascaridole (organic peroxide)	Forbidden											
D	Asphalt, *at or above its flashpoint*	3	NA1999	III	3		150	203	247	Forbidden	Forbidden	D	
D	Asphalt, cut back, *see* Tars, liquid, *etc.*												
	Automobile, motorcycle, tractor, or other self-propelled vehicle, engine, or other mechanical apparatus. see Engines *or* Battery *etc.*												
	Azaurolic acid (salt of) (dry)	Forbidden											
	Azido guanidine picrate (dry)	Forbidden											
	Azido hydroxy tetrazole (mercury and silver salts).	Forbidden											
	3-Azido-1,2-Propylene glycol dinitrate.	Forbidden											
	5-Azido-1-hydroxy tetrazole	Forbidden											
	Azidodithiocarbonic acid	Forbidden											
	Azidoethyl nitrate	Forbidden											
	1-Aziridinylphosphine oxide-(tris), see Tris-(1-aziridinyl)phosphine oxide, solution.												

Azodicarbonamide	4.1	UN3242	II	4.1	38	151	212	240	Forbidden	Forbidden	D	12, 61, 74	
Azotetrazole (dry)	Forbidden												
Barium	4.3	UN1400	II	4.3	A19,B101,B106	151	212	241	15 kg	50 kg	E		
Barium alloys, pyrophoric	4.2	UN1854	I	4.2		None	181	None	Forbidden	Forbidden	D		
Barium azide, *dry or wetted with less than 50 percent water, by mass.*	1.1A	UN0224	II	1.1A, 6.1	111, 117	None	62	None	Forbidden	Forbidden	E		2E,6E
Barium azide, wetted *with not less than 50 percent water, by mass.*	4.1	UN1571	I	4.1, 6.1	A2	None	182	None	Forbidden	0.5 kg	D		28
Barium bromate	5.1	UN2719	II	5.1, 6.1		None	212	242	5 kg	25 kg	A		56, 58, 106
Barium chlorate	5.1	UN1445	II	5.1, 6.1	A9,N34,T8	None	212	242	5 kg	25 kg	A		56, 58, 106
Barium compounds, n.o.s.	6.1	UN1564	II	6.1		None	212	242	25 kg	100 kg	A		
Barium compounds, n.o.s.	6.1	UN1564	III	6.1		153	213	240	100 kg	200 kg	A		
Barium cyanide	6.1	UN1565	I	6.1	N74,N75	None	211	242	5 kg	50 kg	A		26, 40
Barium hypochlorite *with more than 22 percent available chlorine.*	5.1	UN2741	II	5.1, 6.1	A7,A9,N34	152	212	None	5 kg	25 kg	B		56, 58, 106
Barium nitrate	5.1	UN1446	II	5.1, 6.1		None	212	242	5 kg	25 kg	A		
Barium oxide	6.1	UN1884	III	6.1		153	213	240	100 kg	200 kg	A		
Barium perchlorate	5.1	UN1447	II	5.1, 6.1	T8	None	212	242	5 kg	25 kg	A		56, 58, 106
Barium permanganate	5.1	UN1448	II	5.1, 6.1		None	212	242	5 kg	25 kg	D		56, 58, 69, 106, 107
Barium peroxide	5.1	UN1449	II	5.1, 6.1		None	212	242	5 kg	25 kg	A		13, 75, 106
Barium selenate, see Selenates *or* Selenites.													
Barium selenite, see Selenates *or* Selenites.													
D Barium styphnate	1.1A	NA0473	II	1.1A	111, 117	None	62	None	Forbidden	Forbidden	E		2E,6E
Batteries, containing sodium	4.3	UN3292	II	4.3		189	189	189	Forbidden	No limit	A		
Batteries, dry, containing potassium hydroxide solid, *electric, storage.*	8	UN3028	III	8		None	213	None	25 kg gross	230 kg gross	A		

HazMat Table

Bipyridilium pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*	3	UN2782	II	3, 6.1		None	202	243	1 L	60 L	B	40
Bipyridilium pesticides, liquid, toxic	6.1	UN3016	I	6.1	T42	None	201	243	1 L	30 L	B	40
Bipyridilium pesticides, liquid, toxic	6.1	UN3016	II	6.1	T14	None	202	243	5 L	60 L	B	40
Bipyridilium pesticides, liquid, toxic	6.1	UN3016	III	6.1	T14	153	203	241	60 L	220 L	A	40
Bipyridilium pesticides, liquid, toxic, flammable, *flashpoint not less than 23 degrees C.*	6.1	UN3015	I	6.1, 3	T42	None	201	243	1 L	30 L	B	21, 40
Bipyridilium pesticides, liquid, toxic, flammable, *flashpoint not less than 23 degrees C.*	6.1	UN3015	II	6.1, 3	T14	None	202	243	5 L	60 L	B	21, 40
Bipyridilium pesticides, liquid, toxic, flammable, *flashpoint not less than 23 degrees C.*	6.1	UN3015	III	6.1, 3	B1, T14	153	203	242	60 L	220 L	A	21, 40
Bipyridilium pesticides, solid, toxic	6.1	UN2781	I	6.1		None	211	242	5 kg	50 kg	A	40
Bipyridilium pesticides, solid, toxic	6.1	UN2781	II	6.1		None	212	242	25 kg	100 kg	A	40
Bipyridilium pesticides, solid, toxic	6.1	UN2781	III	6.1		153	213	240	100 kg	200 kg	A	40
Bis (Aminopropyl) piperazine, see Corrosive liquid, n.o.s.												
Bisulfate, aqueous solution	8	UN2837	II	8	A7, B2, N34, T8, T26	154	202	242	1 L	30 L	A	
Bisulfate, aqueous solution	8	UN2837	III	8	A7, N34, T7, T26	154	203	241	5 L	60 L	A	26, 40
Bisulfites, aqueous solutions, n.o.s.	8	UN2693	III	8	T8	154	203	241	1 L	30 L	A	26, 40
Black powder *or* Gunpowder, *granular or as a meal.*	1.1D	UN0027	II	1.1D		None	62	None	Forbidden	Forbidden	B	10E,2 6E
D Black powder for small arms	4.1	NA0027	I	4.1	70	None	170	None	Forbidden	Forbidden	E	
Black powder, compressed *or* Gunpowder, compressed *or* Black powder, in pellets *or* Gunpowder, in pellets.	1.1D	UN0028	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
Blasting agent, n.o.s., see Explosives, blasting *etc.*												
Blasting cap assemblies, see Detonator assemblies, non-electric, *for blasting.*												
Blasting caps, electric, see Detonators, electric *for blasting.*												

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Blasting caps, non-electric, see Detonators, non-electric, *for blasting.*	.....			.....		.....	.....	.....	.....	.....		
	Bleaching powder, see Calcium hypochlorite mixtures, *etc.*	.....			.....		.....	.....	.....	.....	.....		
I	Blue asbestos *(Crocidolite)* or Brown asbestos *(amosite, mysorite).*	9	UN2212	II	9		155	216	240	Forbidden	Forbidden	A	34, 40
	Bombs with flammable liquid, *with bursting charge.*	1.2J	UN0400	II	1.2J		.....	62	None	Forbidden	Forbidden	E	7E, 16 E, 23E
	Bombs with flammable liquid, *with bursting charge.*	1.1J	UN0399	II	1.1J		.....	62	None	Forbidden	Forbidden	E	7E, 16 E, 23E
	Bombs, *with bursting charge*	1.1F	UN0033	II	1.1F		.....	62	None	Forbidden	Forbidden	E	
	Bombs, *with bursting charge*	1.2F	UN0291	II	1.2F		.....	62	None	Forbidden	Forbidden	E	
	Bombs, *with bursting charge*	1.2D	UN0035	II	1.2D		.....	62	None	Forbidden	Forbidden	B	3E, 7E
	Bombs, *with bursting charge*	1.1D	UN0034	II	1.1D		.....	62	None	Forbidden	Forbidden	B	3E, 7E
	Bombs, photo-flash	1.3G	UN0299	II	1.3G		.....	62	None	Forbidden	Forbidden	B	
	Bombs, photo-flash	1.2G	UN0039	II	1.2G		.....	62	None	Forbidden	Forbidden	B	
	Bombs, photo-flash	1.1D	UN0038	II	1.1D		.....	62	None	Forbidden	Forbidden	B	
	Bombs, photo-flash	1.1F	UN0037	II	1.1F		.....	62	None	Forbidden	Forbidden	E	
	Bombs, smoke, non-explosive, *with corrosive liquid, without initiating device.*	8	UN2028	II	8		None	160	None	Forbidden	50 kg	E	40
	Boosters with detonator	1.1B	UN0225	II	1.1B		None	62	None	Forbidden	Forbidden	B	2E, 6E
	Boosters with detonator	1.2B	UN0268	II	1.2B		None	62	None	Forbidden	Forbidden	E	1E, 7E
	Boosters, *without detonator*	1.1D	UN0042	II	1.1D		None	62	None	Forbidden	Forbidden	B	
	Boosters, *without detonator*	1.2D	UN0283	II	1.2D		None	62	None	Forbidden	Forbidden	B	
	Borate and chlorate mixtures, see Chlorate and borate mixtures.	.....			.....		.....	.....	.....	.....	.....		
	Borneol	4.1	UN1312	III	4.1	A1	None	213	240	25 kg	100 kg	A	

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols (1)	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	1-Bromo-3-nitrobenzene (unstable at 56 degrees C).	Forbidden			.....		.....	.....	.....	.....	.....		
	Bromoacetic acid, *solid*	8	UN1938	II	8	A7,N34,T9	154	212	240	15 kg	50 kg	A	40
	Bromoacetic acid, *solution*	8	UN1938	II	8	B2,T9	154	202	242	1 L	30 L	A	40
+	Bromoacetone	6.1	UN1569	II	6.1, 3	2	None	193	245	Forbidden	Forbidden	D	40
	Bromoacetyl bromide	8	UN2513	II	8	B2,T9,T26	154	202	242	1 L	30 L	C	40
	Bromobenzene	3	UN2514	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Bromobenzyl cyanides, *liquid*	6.1	UN1694	I	6.1	T18	None	201	243	Forbidden	30 L	D	12, 40
	Bromobenzyl cyanides, *solid*	6.1	UN1694	I	6.1	T18	None	211	242	Forbidden	50 kg	D	12, 40
	1-Bromobutane	3	UN1126	II	3	T1	150	202	242	5 L	60 L	B	40
	2-Bromobutane	3	UN2339	II	3	B1,T1	150	202	242	5 L	60 L	B	40
	Bromochloromethane	6.1	UN1887	III	6.1	T7	153	203	241	60 L	220 L	A	
	2-Bromoethyl ethyl ether	3	UN2340	II	3	T7	150	202	242	5 L	60 L	B	40
	Bromoform	6.1	UN2515	III	6.1	T7	153	203	241	60 L	220 L	A	40
	Bromomethylpropanes	3	UN2342	II	3	T7,T30	150	202	242	5 L	60 L	B	12, 40
	2-Bromopentane	3	UN2343	II	3	T1	150	202	242	5 L	60 L	B	
	2-Bromopropanes	3	UN2344	II	3	T7	150	202	242	5 L	60 L	B	40
	3-Bromopropyne	3	UN2345	II	3	T8	150	202	242	5 L	60 L	D	40
	Bromosilane	Forbidden	.....		.....		.....	.....	.....	.....	.....		
	Bromotoluene-alpha, see Benzyl bromide.	.....	.....		.....		.....	.....	.....	.....	.....		
	Bromotrifluoroethylene	2.1	UN2419		2.1		None	304	314, 315	Forbidden	150 kg	B	40
	Bromotrifluoromethane *or* Refrigerant gas, R 13B1.	2.2	UN1009		2.2		306	304	314, 315	75 kg	150 kg	A	
	Brucine	6.1	UN1570	I	6.1		None	211	242	5 kg	50 kg	A	
	Bursters, *explosive*	1.1D	UN0043	II	1.1D		None	62	None	Forbidden	Forbidden	B	

	Carbon monoxide and hydrogen mixture, compressed.	2.3	UN2600		2.3, 2.1	6	None	302	302	Forbidden	Forbidden	D	40		
D	Carbon monoxide, refrigerated liquid *(cryogenic liquid)*.	2.3	NA9202		2.3, 2.1	4	None	316	318	Forbidden	Forbidden	D			
	Carbon tetrabromide	6.1	UN2516	III	6.1		153	213	240	100 kg	200 kg	A	25		
	Carbon tetrachloride	6.1	UN1846	II	6.1	N36,T8	None	202	243	5 L	60 L	A	40		
I	Carbon, *animal or vegetable origin*	4.2	UN1361	II	4.2		None	212	242	Forbidden	Forbidden	A	12		
I	Carbon, *animal or vegetable origin*	4.2	UN1361	III	4.2		None	213	241	Forbidden	Forbidden	A	12		
I	Carbon, activated	4.2	UN1362	III	4.2		None	213	241	0.5 kg	0.5 kg	A	12		
	Carbonyl chloride, see Phosgene														
	Carbonyl fluoride, compressed	2.3	UN2417		2.3, 8	2	None	302	None	Forbidden	Forbidden	D	40		
	Carbonyl sulfide	2.3	UN2204		2.3, 2.1	3,B14	None	304	314, 315	Forbidden	25 kg	D	40		
	Cartridge cases, empty primed, see Cases, cartridge, empty, with primer.														
	Cartridges for weapons, *with bursting charge*.	1.4E	UN0412	II	1.4E		None	62	None	Forbidden	75 kg	A	24E		
	Cartridges for weapons, *with bursting charge*.	1.4F	UN0348	II	1.4F		None	62	None	Forbidden	Forbidden	E			
	Cartridges for weapons, *with bursting charge*.	1.2E	UN0321	II	1.2E		None	62	None	Forbidden	Forbidden	B			
	Cartridges for weapons, *with bursting charge*.	1.2F	UN0007	II	1.2F		None	62	None	Forbidden	Forbidden	E			
	Cartridges for weapons, *with bursting charge*.	1.1E	UN0006	II	1.1E		None	62	None	Forbidden	Forbidden	B			
	Cartridges for weapons, *with bursting charge*.	1.1F	UN0005	II	1.1F		None	62	None	Forbidden	Forbidden	E			
	Cartridges for weapons, blank	1.1C	UN0326	II	1.1C		None	62	None	Forbidden	Forbidden	B			
	Cartridges for weapons, blank	1.2C	UN0413	II	1.2C		None	62	None	Forbidden	Forbidden	B			
	Cartridges for weapons, blank *or* Cartridges, small arms, blank.	1.4S	UN0014	II	None		63	62	None	25 kg	100 kg	A			
	Cartridges for weapons, blank *or* Cartridges, small arms, blank.	1.3C	UN0327	II	1.3C		None	62	None	Forbidden	Forbidden	B			
	Cartridges for weapons, blank *or* Cartridges, small arms, blank.	1.4C	UN0338	II	1.4C		None	62	None	Forbidden	75 kg	A	24E		

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.**) Exceptions (8A)	(8) Packaging (§173.**) Non-bulk (8B)	(8) Packaging (§173.**) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Cartridges for weapons, inert projectile.	1.2C	UN0328	II	1.2C.		None	62	None	Forbidden	Forbidden	B	
	Cartridges for weapons, inert projectile *or* Cartridges, small arms.	1.4C	UN0339	II	1.4C.		None	62	None	Forbidden	75 kg	B	
	Cartridges for weapons, inert projectile *or* Cartridges, small arms.	1.4S	UN0012	II	None		63	62	None	25 kg	100 kg	A	
	Cartridges for weapons, inert projectile *or* Cartridges, small arms.	1.3C	UN0417	II	1.3C.		None	62	None	Forbidden	Forbidden	B	
	Cartridges, actuating, for aircraft ejector seat catapult, fire extinguisher, canopy removal or apparatus, see Cartridges, power device.	.....	.....		.....		.....	.....	.....	.....	.....	.....	
	Cartridges, explosive, see Charges, demolition.	.....	.....		.....		.....	.....	.....	.....	.....	.....	
	Cartridges, flash	1.3G	UN0050	II	1.3G.		None	62	None	Forbidden	75 kg	B	
	Cartridges, flash	1.1G	UN0049	II	1.1G.		None	62	None	Forbidden	Forbidden	B	
	Cartridges, oil well	1.4C	UN0278	II	1.4C.		None	62	None	Forbidden	75 kg	A	24E
	Cartridges, oil well	1.3C	UN0277	II	1.3C.		None	62	None	Forbidden	Forbidden	B	
	Cartridges, power device	1.2C	UN0381	II	1.2C.		None	62	None	Forbidden	Forbidden	B	
	Cartridges, power device	1.4S	UN0323	II	1.4S.	110	63	62	None	25 kg	100 kg	A	
	Cartridges, power device	1.4C	UN0276	II	1.4C.	110	None	62	None	Forbidden	75 kg	A	24E
	Cartridges, power device	1.3C	UN0275	II	1.3C.		None	62	None	Forbidden	75 kg	B	
	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	1.3G	UN0054	II	1.3G		None	62	None	Forbidden	75 kg	B	24E		
	Cartridges, signal	1.4G	UN0312	II	1.4G		None	62	None	Forbidden	75 kg	A			
	Cartridges, signal	1.4S	UN0405	II	1.4S		None	62	None	25 kg	100 kg	A			
D	Cartridges, small arms	ORM-D	None		None		63	None	None	30 kg gross	30 kg gross	A			
	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	1.4S	50	None	62	None	25 kg	100 kg	A	24E		
	Cases, cartridges, empty with primer	1.4C	UN0379	II	1.4C	50	None	62	None	Forbidden	75 kg	A			
	Cases, combustible, empty, without primer	1.4C	UN0446	II	1.4C		None	62	None	Forbidden	75 kg	A	24E		
	Cases, combustible, empty, without primer	1.3C	UN0447	II	1.3C		None	62	None	Forbidden	Forbidden	B			
	Casinghead gasoline see Gasoline														
AW	Castor beans *or* Castor meal *or* Castor pomace *or* Castor flake	9	UN2969	II	None		155	204	240	No limit	No limit	E	34, 40		
	Caustic alkali liquids, n.o.s.	8	UN1719	II	8	B2,T14	154	202	242	1 L	30 L	A			
	Caustic alkali liquids, n.o.s.	8	UN1719	III	8	T7	154	203	241	5 L	60 L	A			
	Caustic potash, see Potassium hydroxide *etc.*														
	Caustic soda, (etc.) see Sodium hydroxide *etc.*														
	Cells, containing sodium	4.3	UN3292	II	4.3		189	189	189	25 kg	No limit	A			
	Celluloid, *in block, rods, rolls, sheets, tubes, etc., except scrap*	4.1	UN2000	III	4.1		None	213	240	25 kg	100 kg	A			
	Celluloid, scrap	4.2	UN2002	III	4.2		None	213	241	Forbidden	Forbidden	D			
	Cement, see Adhesives *containing flammable liquid.*														
	Cerium, *slabs, ingots, or rods*	4.1	UN1333	II	4.1	N34	None	212	240	15 kg	50 kg	A	74, 91		
	Cerium, *turnings or gritty powder*	4.3	UN3078	II	4.3	A1,B106,B109	151	212	242	15 kg	50 kg	E			
	Cesium *or* Caesium	4.3	UN1407	I	4.3	A19,B100,N34, N40	None	211	242	Forbidden	15 kg	D			
	Cesium nitrate *or* Caesium nitrate	5.1	UN1451	III	5.1	A1,A29	152	213	240	25 kg	100 kg	A			

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	Other (10B)
D	Charcoal *briquettes, shell, screenings, wood, etc.*	4.2	NA1361	III	4.2		151	213	240	25 kg	100 kg	A	12
	Charges, bursting, plastics bonded	1.2D	UN0458	II	1.2D		None	62	None	Forbidden	Forbidden	B	24E
	Charges, bursting, plastics bonded	1.4D	UN0459	II	1.4D		None	62	None	Forbidden	75 kg	A	
	Charges, bursting, plastics bonded	1.1D	UN0457	II	1.1D		None	62	None	Forbidden	Forbidden	B	
	Charges, bursting, plastics bonded	1.4S	UN0460	II	1.4S		None	62	None	25 kg	100 kg	A	
	Charges, bursting, plastics bonded	1.1D	UN0048	II	1.1D		None	62	None	Forbidden	Forbidden	B	3E,7E
	Charges, demolition	1.1D	UN0056	II	1.1D		None	62	None	Forbidden	Forbidden	B	
	Charges, depth												
	Charges, expelling, explosive, for fire extinguishers, see Cartridges, power device.						None	62	None	Forbidden	Forbidden	B	
	Charges, explosive, commercial *without detonator.*	1.1D	UN0442	II	1.1D		None	62	None	Forbidden	Forbidden	B	
	Charges, explosive, commercial *without detonator.*	1.2D	UN0443	II	1.2D		None	62	None	Forbidden	75 kg	A	24E
	Charges, explosive, commercial *without detonator.*	1.4D	UN0444	II	1.4D		None	62	None	Forbidden	Forbidden	B	
	Charges, explosive, commercial *without detonator.*	1.4S	UN0445	II	1.4S		None	62	None	25 kg	100 kg	A	
	Charges, propelling	1.3C	UN0272	II	1.3C		None	62	None	Forbidden	Forbidden	B	
	Charges, propelling	1.2C	UN0415	II	1.2C		None	62	None	Forbidden	Forbidden	B	
	Charges, propelling	1.4C	UN0491	II	1.4C	122	None	62	None	Forbidden	75 kg	A	1E,5E
	Charges, propelling	1.1C	UN0271	II	1.1C		None	62	None	Forbidden	Forbidden	B	
	Charges, propelling, for cannon	1.3C	UN0242	II	1.3C		None	62	None	Forbidden	Forbidden	B	1E,5E
	Charges, propelling, for cannon	1.1C	UN0279	II	1.1C		None	62	None	Forbidden	Forbidden	B	1E,5E
	Charges, propelling, for cannon	1.2C	UN0414	II	1.2C		None	62	None	Forbidden	Forbidden	B	1E,5E
	Charges, shaped, commercial *without detonator.*	1.2D	UN0439	II	1.2D		None	62	None	Forbidden	Forbidden	B	

Charges, shaped, commercial *without detonator.*	1.4D	UN0440	II	1.4D		None	62	None	Forbidden	75 kg	A		24E	
Charges, shaped, commercial *without detonator.*	1.4S	UN0441	II	1.4S		None	62	None	25 kg	100 kg	A			
Charges, shaped, commercial, *without detonator.*	1.1D	UN0059	II	1.1D		None	62	None	Forbidden	Forbidden	B			
Charges, shaped, flexible, linear	1.1D	UN0288	II	1.1D	101	None	62	None	Forbidden	Forbidden	B		24E	
Charges, shaped, flexible, linear	1.4D	UN0237	II	1.4D		None	62	None	Forbidden	75 kg	A		1E,5E	
Charges, supplementary explosive	1.1D	UN0060	II	1.1D		None	62	None	Forbidden	Forbidden	B			
Chemical kits *(must be classified and labelled according to the hazard class of the constituent(s) and must meet the requirements of special provision 15 in 172.102(c)(1)).*														
Chemical kits *or* First aid kits *(containing hazardous materials).*	9	UN3316	9		15	None	None	None	10 kg	10 kg	A		40	
Chloral, anhydrous, inhibited	6.1	UN2075	II	6.1	B101,T14	None	202	243	5 L	60 L	D		56, 58, 106	
Chlorate and borate mixtures	5.1	UN1458	II	5.1	A9,N34	152	212	240	5 kg	25 kg	A			
Chlorate and borate mixtures	5.1	UN1458	III	5.1	A9,N34	152	213	240	25 kg	100 kg	A		56, 58, 106	
Chlorate and magnesium chloride mixtures.	5.1	UN1459	II	5.1	A9,N34,T8	152	212	240	5 kg	25 kg	A		56, 58, 106	
Chlorate and magnesium chloride mixtures.	5.1	UN1459	III	5.1	A9,N34,T8	152	213	240	25 kg	100 kg	A		56, 58, 106	
Chlorate of potash, see Potassium chlorate.														
Chlorate of soda, see Sodium chlorate.													56, 58, 106	
Chlorates, inorganic, aqueous solution, n.o.s.	5.1	UN3210	II	5.1	T8	152	202	242	1 L	5 L	B			
Chlorates, inorganic, n.o.s.	5.1	UN1461	II	5.1	A9,N34	152	212	242	5 kg	25 kg	A		56, 58, 106	
Chloric acid aqueous solution, *with not more than 10 percent chloric acid.*	5.1	UN2626	II	5.1	T25	None	229	None	Forbidden	Forbidden	D		56, 58, 106	

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	Identification Numbers (4)	PG (5)	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	Other (10B)
	Coke, hot	Forbidden											
	Collodion, see Nitrocellulose *etc.*												
D	Combustible liquid, n.o.s.	Combustible liquid	NA1993	III	None	T1	150	203	241	60 L	220 L	A	
	Components, explosive train, n.o.s.	1.1B	UN0461	II	1.1B	101	None	62	None	Forbidden	Forbidden	B	1E,6E
	Components, explosive train, n.o.s.	1.2B	UN0382	II	1.2B	101	None	62	None	Forbidden	Forbidden	B	1E,6E
	Components, explosive train, n.o.s.	1.4B	UN0383	II	1.4B	101	None	62	None	Forbidden	75 kg	A	24E
	Components, explosive train, n.o.s.	1.4S	UN0384	II	1.4S	101	None	62	None	25 kg	100 kg	A	
	Composition B, see Hexolite, *etc.*												
D	Compounds, cleaning liquid	8	NA1760	II	8	B2,N37,T14	154	202	242	1 L	30 L	B	40
D	Compounds, cleaning liquid	8	NA1760	III	8	N37,T7	154	203	241	5 L	60 L	A	40
D	Compounds, cleaning liquid	3	NA1993	I	3	T42	150	201	243	1 L	30 L	E	
D	Compounds, cleaning liquid	3	NA1993	II	3	T8,T31	150	202	242	5 L	60 L	B	
D	Compounds, cleaning liquid	3	NA1993	III	3	B1,B52,T7,T30	150	203	242	60 L	220 L	A	
D	Compounds, cleaning liquid	8	NA1760	I	8	A7,B10,T42	None	201	243	0.5 L	2.5 L	B	40
D	Compounds, tree killing, liquid *or* Compounds, weed killing, liquid	3	NA1993	I	3	T42	150	201	243	1 L	30 L	E	
D	Compounds, tree killing, liquid *or* Compounds, weed killing, liquid	3	NA1993	II	3	T8,T31	150	202	242	5 L	60 L	B	
D	Compounds, tree killing, liquid *or* Compounds, weed killing, liquid	3	NA1993	III	3	B1,B52,T7,T30	150	203	242	60 L	220 L	A	
D	Compounds, tree killing, liquid *or* Compounds, weed killing, liquid	6.1	NA2810	III	6.1		153	203	241	60 L	220 L	A	40
D	Compounds, tree killing, liquid *or* Compounds, weed killing, liquid	6.1	NA2810	I	6.1		None	201	243	1 L	30 L	B	40
D	Compounds, tree killing, liquid *or* Compounds, weed killing, liquid	6.1	NA2810	II	6.1		None	202	243	5 L	60 L	B	40
D	Compounds, tree killing, liquid *or* Compounds, weed killing, liquid	8	NA1760	I	8	A7,B10,T42	None	201	243	0.5 L	2.5 L	B	40

	Compressed gases, toxic, n.o.s. *Inhalation Hazard Zone D.*	2.3	UN1955		2.3	4	None	302, 305	314, 315	Forbidden	Forbidden	D	40	
D	Consumer commodity	ORM-D	None		None			156, 306	None	30 kg gross	30 kg gross	A		
	Contrivances, water-activated, *with burster, expelling charge or propelling charge.*	1.2L	UN0248	II	1.2L	101	None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E	
	Contrivances, water-activated, *with burster, expelling charge or propelling charge.*	1.3L	UN0249	II	1.3L	101	None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E	
	Copper acetoarsenite	6.1	UN1585	II	6.1		None	212	242	25 kg	100 kg	A		
	Copper acetylide	Forbidden												
	Copper amine azide	Forbidden												
	Copper arsenite	6.1	UN1586	II	6.1		None	212	242	25 kg	100 kg	A	40	
	Copper based pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*	3	UN2776	II	3, 6.1		None	202	243	1 L	60 L	B		
	Copper based pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*	3	UN2776	I	3, 6.1		None	201	243	Forbidden	30 L	B	40	
	Copper based pesticides, liquid, toxic.	6.1	UN3010	I	6.1	T42	None	201	243	1 L	30 L	B	40	
	Copper based pesticides, liquid, toxic.	6.1	UN3010	II	6.1	T14	None	202	243	5 L	60 L	B	40	
	Copper based pesticides, liquid, toxic.	6.1	UN3010	III	6.1	T14	153	203	241	60 L	220 L	A	40	
	Copper based pesticides, liquid, toxic, flammable *flashpoint not less than 23 degrees C.*	6.1	UN3009	I	6.1, 3.	T42	None	201	243	1 L	30 L	B	40	
	Copper based pesticides, liquid, toxic, flammable *flashpoint not less than 23 degrees C.*	6.1	UN3009	II	6.1, 3.	T14	None	202	243	5 L	60 L	B	40	
	Copper based pesticides, liquid, toxic, flammable *flashpoint not less than 23 degrees C.*	6.1	UN3009	III	6.1, 3.	B1,T14	153	203	242	60 L	220 L	A	40	
	Copper based pesticides, solid, toxic.	6.1	UN2775	I	6.1		None	211	242	5 kg	50 kg	A	40	
	Copper based pesticides, solid, toxic.	6.1	UN2775	II	6.1		None	212	242	25 kg	100 kg	A	40	

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.**) Exceptions (8A)	(8) Packaging (§173.**) Non-bulk (8B)	(8) Packaging (§173.**) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Copper based pesticides, solid, toxic.	6.1	UN2775	III	6.1		153	213	240	100 kg	200 kg	A	40
	Copper chlorate	5.1	UN2721	II	5.1	A1	152	212	242	5 kg	25 kg	A	56, 58, 106
	Copper chloride	8	UN2802	III	8		154	213	240	25 kg	100 kg	A	
	Copper cyanide	6.1	UN1587	II	6.1		None	204	242	25 kg	100 kg	A	26
	Copper selenate, see Selenates *or* Selenites.												
	Copper selenite, see Selenates *or* Selenites.												
	Copper tetramine nitrate	Forbidden											
AW	Copra	4.2	UN1363	III	4.2		None	213	241	Forbidden	Forbidden	A	13, 19, 48, 119
	Cord detonating *or* Fuse detonating *metal clad.*	1.2D	UN0102	II	1.2D		None	62	None	Forbidden	Forbidden	B	
	Cord, detonating *or* Fuse, detonating *metal clad.*	1.1D	UN0290	II	1.1D		None	62	None	Forbidden	Forbidden	B	
	Cord, detonating, *flexible*	1.4D	UN0289	II	1.4D		None	62	None	Forbidden	75 kg	A	24E
	Cord, detonating, *flexible*	1.1D	UN0065	II	1.1D	102	63(a)	62	None	Forbidden	Forbidden	B	
	Cord, detonating, mild effect *or* Fuse, detonating, mild effect *metal clad.*	1.4D	UN0104	II	1.4D		None	62	None	Forbidden	75 kg	A	24E
	Cord, igniter	1.4G	UN0066	II	1.4G		None	62	None	Forbidden	75 kg	A	24E
	Cordeau detonant fuse, see Cord, detonating, *etc.*; Cord, detonating, *flexible.*												
	Cordite, see Powder, smokeless												
	Corrosive liquid, acidic, inorganic, n.o.s.	8	UN3264	I	8	B10	None	201	243	0.5 L	2.5 L	B	40

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols (1)	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	Location (10A)	Other (10B)
	Cyclonite, *see* Cyclotrimethylenetrinitramine, *etc.*												
	Cyclooctadiene phosphines, *see* 9-Phosphabicyclononanes.												
	Cyclooctadienes	3	UN2520	III	3	B1,T1	150	203	242	60 L	220 L	A	1E,5E
										5 L	60 L	B	
	Cyclooctatetraene	3	UN2358	II	3	T8	150	202	242	5 L	60 L	E	
	Cyclopentane	3	UN1146	II	3	B101,T14	150	202	242				
	Cyclopentane, methyl, see Methylcyclopentane.												
	Cyclopentanol	3	UN2244	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Cyclopentanone	3	UN2245	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Cyclopentene	3	UN2246	II	3	B101,T13	150	202	242	5 L	60 L	E	
	Cyclopropane	2.1	UN1027		2.1		306	304	314, 315	Forbidden	150 kg	E	40
	Cyclotetramethylene tetranitramine (dry or unphlegmatized) (HMX).	Forbidden											
	Cyclotetramethylenetetranitramine, desensitized *or* Octogen, desensitized *or* HMX, desensitized.	1.1D	UN0484	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Cyclotetramethylenetetranitramine, wetted *or* HMX, wetted *or* Octogen, wetted *with not less than 15 percent water, by mass.*	1.1D	UN0226	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Cyclotrimethylenenitramine and octogen, mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc.*												

	Cyclotrimethylenetrinitramine and cyclotetramethylenetetranitramine mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted or desensitized *etc.*	....			....		....	....	....	....	....		
	Cyclotrimethylenetrinitramine and HMX mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc.*	....			....		....	....	....	....	....		
	Cyclotrimethylenetrinitramine, desensitized *or* Cyclonite, desensitized *or* Hexogen, desensitized *or* RDX, desensitized.	1.1D	UN0483	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Cyclotrimethylenetrinitramine, wetted *or* Cyclonite, wetted *or* Hexogen, wetted *or* RDX, wetted *with not less than 15 percent water by mass.*	1.1D	UN0072	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Cymenes	3	UN2046	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Decaborane	4.1	UN1868	II	4.1, 6.1	A19,A20	None	212	None	Forbidden	50 kg	A	
	Decahydronaphthalene	3	UN1147	III	3	B1,T1	150	203	242	60 L	220 L	A	
	n-Decane	3	UN2247	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Deflagrating metal salts of aromatic nitroderivatives, n.o.s.	1.3C	UN0132	II	1.3C		None	62	None	Forbidden	Forbidden	B	1E,5E
	Delay electric igniter, see Igniters	....			....		....	....	....	....	....		
D	Denatured alcohol	3	NA1986	I	3, 6.1	T8,T31	None	201	243	Forbidden	30 L	E	40
D	Denatured alcohol	3	NA1986	II	3, 6.1	T8,T31	None	202	243	1 L	60 L	E	40
D	Denatured alcohol	3	NA1986	III	3, 6.1	B1,T8,T31	150	203	242	60 L	220 L	E	40
D	Denatured alcohol	3	NA1987	II	3	T8,T31	150	202	242	5 L	60 L	B	
D	Denatured alcohol	3	NA1987	III	3	B1,T7,T30	150	203	242	60 L	220 L	A	
	Depth charges, see Charges, depth	....			....		....	....	....	....	....		
	Detonating relays, see Detonators, *etc.*	....			....		....	....	....	....	....		
	Detonator assemblies, non-electric *for blasting.*	1.1B	UN0360	II	1.1B		None	62	None	Forbidden	Forbidden	B	2E,6E

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Detonator assemblies, non-electric, *for blasting.*	1.4B	UN0361	II	1.4B	103	63(f), 63(g)	62	None	Forbidden	75 kg	A	24E
	Detonator assemblies, non-electric *for blasting.*	1.4S	UN0500	II	1.4S	104	63(f), 63(g)	62	None	25 kg	100 kg	A	
	Detonators for ammunition	1.1B	UN0073	II	1.1B		None	62	None	Forbidden	Forbidden	B	2E,6E
	Detonators for ammunition	1.4B	UN0365	II	1.4B	103	None	62	None	Forbidden	75 kg	A	24E
	Detonators for ammunition	1.4S	UN0366	II	1.4S	104	None	62	None	25 kg	100 kg	A	
	Detonators for ammunition	1.2B	UN0364	II	1.2B		None	62	None	Forbidden	Forbidden	B	2E,6E
	Detonators, electric *for blasting*	1.4S	UN0456	II	1.4S	104	63(f), 63(g)	62	None	25 kg	100 kg	A	
	Detonators, electric, *for blasting*	1.1B	UN0030	II	1.1B		63(f), 63(g)	62	None	Forbidden	Forbidden	B	2E,6E
	Detonators, electric, *for blasting*	1.4B	UN0255	II	1.4B	103	63(f), 63(g)	62	None	Forbidden	75 kg	A	24E
	Detonators, non-electric *for blasting*	1.4S	UN0455	II	1.4S	104	None	62	None	25 kg	100 kg	A	
	Detonators, non-electric, *for blasting*	1.1B	UN0029	II	1.1B		None	62	None	Forbidden	Forbidden	B	2E,6E
	Detonators, non-electric, *for blasting*	1.4B	UN0267	II	1.4B	103	63(f), 63(g)	62	None	Forbidden	75 kg	A	24E
	Deuterium, compressed	2.1	UN1957		2.1		306	302	None	Forbidden	150 kg	E	40
	Devices, small, hydrocarbon gas powered *or* Hydrocarbon gas refills for small devices *with release device.*	2.1	UN3150		2.1		306	304	None	Forbidden	150 kg	B	40
	Di-(1-hydroxytetrazole) (dry)	Forbidden											
	Di-(1-naphthoyl) peroxide	Forbidden											
	2,2-Di-(4,4-di-tert-butylperoxycyclohexyl) propane, with more than 42 percent with inert solid.	Forbidden											

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	1,1'-Diazoaminonaphthalene	Forbidden											
	Diazoaminotetrazole (dry)	Forbidden											
	Diazodinitrophenol (dry)	Forbidden											
	Diazodinitrophenol, wetted *with not less than 40 percent water or mixture of alcohol and water, by mass.*	1.1A	UN0074	II	1.1A	111, 117	None	62	None	Forbidden	Forbidden	E	2E,6E
	Diazodiphenylmethane	Forbidden											
	Diazonium nitrates (dry)	Forbidden											
	Diazonium perchlorates (dry)	Forbidden											
	1,3-Diazopropane	Forbidden											
	Dibenzyl peroxydicarbonate, with more than 87 percent with water.	Forbidden											
	Dibenzyldichlorosilane	8	UN2434	II	8	B2,T8,T26	154	202	242	1 L	30 L	C	40
D	Diborane mixtures	2.1	NA1911		2.1	5	None	302	245	Forbidden	Forbidden	D	40, 57
	Diborane, compressed	2.3	UN1911		2.3, 2.1	1	None	302	None	Forbidden	Forbidden	D	40, 57
	Dibromoacetylene	Forbidden					None	202	243	5 L	60 L	B	40
	1,2-Dibromobutan-3-one	6.1	UN2648	II	6.1		153	203	241	60 L	220 L	A	
	Dibromochloropropane	6.1	UN2872	III	6.1	T7	155	203	241	100 L	220 L	A	25
A	Dibromodifluoromethane, *R 12B2*	9	UN1941	III	None	T22							
	1,2-Dibromoethane, see Ethylene dibromide.												
	Dibromomethane	6.1	UN2664	III	6.1	T7	153	203	241	60 L	220 L	A	
	Dibutyl ethers	3	UN1149	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Dibutylaminoethanol	6.1	UN2873	III	6.1	T1	153	203	241	60 L	220 L	A	
	N,N'-Dichlorazodicarbonamidine (salts of) (dry).	Forbidden											

Diethyl ether *or* Ethyl ether	3	UN1155	I	3	T21	150	201	243	1 L	30 L	E	40		
Diethyl ketone	3	UN1156	II	3	T1	150	202	242	5 L	60 L	B			
Diethyl peroxydicarbonate, with more than 27 percent in solution.	Forbidden													
Diethyl sulfate	6.1	UN1594	II	6.1	B101,T14	None	202	243	5 L	60 L	C			
Diethyl sulfide	3	UN2375	II	3	B101,T14	None	202	243	1 L	60 L	E			
Diethylamine	3	UN1154	II	3, 8	B101,N34,T8	None	202	243	1 L	5 L	E	40		
2-Diethylaminoethanol	8	UN2686	II	8, 3	B2,T15,T26	None	202	243	1 L	30 L	A			
Diethylaminopropylamine	3	UN2684	III	3, 8	B1,T8	150	203	242	5 L	60 L	A			
N,N-Diethylaniline	6.1	UN2432	III	6.1	T2	153	203	241	60 L	220 L	A			
Diethylbenzene	3	UN2049	III	3	B1,T1	150	203	242	60 L	220 L	A			
Diethyldichlorosilane	8	UN1767	II	8, 3	A7,B6,B100, N34,T8,T26	None	202	243	Forbidden	30 L	C	40		
Diethylene glycol dinitrate	Forbidden													
Diethyleneglycol dinitrate, desensitized *with not less than 25 percent non-volatile, water-insoluble phlegmatizer, by mass.*	1.1D	UN0075	II	1.1D		None	62	None	Forbidden	Forbidden	B		1E,4E, 21E	
Diethylenetriamine	8	UN2079	II	8	B2,T8	154	202	242	1 L	30 L	A	40		
N,N-Diethylethylenediamine	8	UN2685	II	8, 3	T8	None	202	243	1 L	30 L	A			
Diethylgold bromide	Forbidden													
Diethylthiophosphoryl chloride	8	UN2751	II	8	B2,T8	None	212	240	15 kg	50 kg	C	40		
Diethylzinc	4.2	UN1366	I	4.2	B11,T28,T40	None	181	244	Forbidden	Forbidden	D	18		
Difluorochloroethanes, see 1-Chloro-1,1-difluoroethanes.														
1,1-Difluoroethane *or* Refrigerant gas, R 152a.	2.1	UN1030		2.1		306	304	314, 315	Forbidden	150 kg	B	40		
1,1-Difluoroethylene *or* Refrigerant gas, R 1132a.	2.1	UN1959		2.1		306	304	None	Forbidden	150 kg	E	40		
Difluoromethane *or* Refrigerant gas, R 32.	2.1	UN3252		2.1		306	302	314, 315	Forbidden	150 kg	D	40		
Difluorophosphoric acid, anhydrous	8	UN1768	II	8	A6,A7,B2,N5, N34,T9,T27	None	202	242	1 L	30 L	A	40		
2,3-Dihydropyran	3	UN2376	II	3	T7	150	202	242	5 L	60 L	B			
1,8-Dihydroxy-2,4,5,7-tetranitroanthraquinone (chrysamminic acid).	Forbidden													
Diiodoacetylene	Forbidden													

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols (1)	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Dinitro-o-cresol, *solid*	6.1	UN1598	II	6.1	T14	None	212	242	25 kg	100 kg	A	
	Dinitro-o-cresol, *solution*	6.1	UN1598	II	6.1	T14	None	202	243	5 L	60 L	A	
	Dinitroanilines	6.1	UN1596	II	6.1	T14	None	212	242	25 kg	100 kg	A	91
	Dinitrobenzenes, *liquid*	6.1	UN1597	II	6.1	11,T14	None	202	243	5 L	60 L	A	91
	Dinitrobenzenes, *solid*	6.1	UN1597	II	6.1	11	None	212	242	25 kg	100 kg	A	91
	Dinitrochlorobenzene, see Chlorodinitrobenzene.												
	1,1-Dinitroethane (dry)	Forbidden											
	1,2-Dinitroethane	Forbidden											
	Dinitrogen tetroxide	2.3	UN1067		2.3, 5.1, 8.	1,B7,B12,B14, B45,B46,B61, B66,B67,B77	None	336	314	Forbidden	Forbidden	D	40, 89, 90
	Dinitroglycoluril *or* Dingu	1.1D	UN0489	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Dinitromethane	Forbidden											
	Dinitrophenol solutions	6.1	UN1599	II	6.1	T8	None	202	243	5 L	60 L	A	36
	Dinitrophenol solutions	6.1	UN1599	III	6.1	T7	153	203	241	60 L	220 L	A	36
	Dinitrophenol, *dry or wetted with less than 15 percent water, by mass.*	1.1D	UN0076	II	1.1D, 6.1		None	62	None	Forbidden	Forbidden	B	1E,5E
	Dinitrophenol, wetted *with not less than 15 percent water, by mass.*	4.1	UN1320	I	4.1, 6.1	23,A8,A19,A20, N41	None	211	None	1 kg	15 kg	E	28, 36
	Dinitrophenolates *alkali metals, dry or wetted with less than 15 percent water, by mass.*	1.3C	UN0077	II	1.3C, 6.1		None	62	None	Forbidden	Forbidden	B	1E,5E
	Dinitrophenolates, wetted *with not less than 15 percent water, by mass.*	4.1	UN1321	I	4.1, 6.1	23,A8,A19,A20, N41	None	211	None	1 kg	15 kg	E	28, 36
	Dinitropropylene glycol	Forbidden											

2,4-Dinitroresorcinol (heavy metal salts of) (dry).	Forbidden														
4,6-Dinitroresorcinol (heavy metal salts of) (dry).	Forbidden														
Dinitroresorcinol, *dry or wetted with less than 15 percent water, by mass.*	1.1D	UN0078	II	1.1D		None	62	None	Forbidden	Forbidden	B		1E,5E
Dinitroresorcinol, wetted *with not less than 15 percent water, by mass.*	4.1	UN1322	I	4.1	23,A8,A19,A20, N41	None	211	None	1 kg	15 kg	E		28, 36
3,5-Dinitrosalicylic acid (lead salt) (dry).	Forbidden												
Dinitrosobenzene	1.3C	UN0406	II	1.3C		None	62	None	Forbidden	Forbidden	B		1E,5E
Dinitrosobenzylamidine and salts of (dry).	Forbidden												
2,2-Dinitrostilbene	Forbidden												
Dinitrotoluenes, *liquid*	6.1	UN2038	II	6.1	T8	None	202	243	5 L	60 L	A		
Dinitrotoluenes, *solid*	6.1	UN2038	II	6.1	T8	None	212	242	25 kg	100 kg	A		
Dinitrotoluenes, molten	6.1	UN1600	II	6.1	B100,T14	None	202	243	Forbidden	Forbidden	C		
1,9-Dinitroxy pentamethylene-2,4,6,8-tetramine (dry).	Forbidden												
Dioxane	3	UN1165	II	3	T8	150	202	242	5 L	60 L	B		
Dioxolane	3	UN1166	II	3	T8	150	202	242	5 L	60 L	B		40
Dipentene	3	UN2052	III	3	B1,T1	150	203	242	60 L	220 L	A		
Diphenylamine chloroarsine	6.1	UN1698	I	6.1		None	201	None	Forbidden	Forbidden	D		40
Diphenylchloroarsine, liquid	6.1	UN1699	I	6.1	A8,B14,B32, N33,N34	None	201	243	Forbidden	30 L	D		40
Diphenylchloroarsine, solid	6.1	UN1699	I	6.1	A8,B14,B32, N33,N34	None	211	242	Forbidden	15 kg	D		40
Diphenyldichlorosilane	8	UN1769	II	8	A7,B2,N34,T8, T26	None	202	242	Forbidden	30 L	C		40
Diphenylmethyl bromide	8	UN1770	II	8		154	212	240	15 kg	50 kg	D		40
Dipicryl sulfide, *dry or wetted with less than 10 percent water, by mass.*	1.1D	UN0401	II	1.1D		None	62	None	Forbidden	Forbidden	B		1E,5E
Dipicryl sulfide, wetted *with not less than 10 percent water, by mass.*	4.1	UN2852	I	4.1	A2,N41	None	211	None	Forbidden	0.5 kg	D		28

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class of division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	2-Ethylhexyl chloroformate.	6.1	UN2748	II	6.1, 8	T12	None	202	243	1 L	30 L	A	12, 13, 21, 25, 40, 100
	2-Ethylhexylamine.	3	UN2276	III	3, 8	B1,T2	150	203	242	5 L	60 L	A	40
	Ethylphenyldichlorosilane.	8	UN2435	II	8	A7,B2,N34,T8, T26	None	202	242	Forbidden	30 L	C	
	1-Ethylpiperidine.	3	UN2386	II	3, 8	T8	None	202	243	1 L	5 L	B	
	N-Ethyltoluidines.	6.1	UN2754	II	6.1	T14	None	202	243	5 L	60 L	A	40
	Ethyltrichlorosilane.	3	UN1196	II	3, 8	A7,B100,N34, T15,T26	None	202	243	1 L	5 L	B	
	Etiologic agent, see Infectious substances, *etc.*).	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	
	Explosive articles, see Articles, explosive , n.o.s. *etc.*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	
	Explosive substances, see Substances, explosive, n.o.s. *etc.*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	
	Explosive, blasting, type A.	1.1D	UN0081	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E, 21E
	Explosive, blasting, type B.	1.1D	UN0082	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Explosive, blasting, type B *or* Agent blasting, Type B.	1.5D	UN0331	II	1.5D	105, 106	None	62	None	Forbidden	Forbidden	B	1E,5E
	Explosive, blasting, type C.	1.1D	UN0083	II	1.1D	123	None	62	None	Forbidden	Forbidden	B	1E,5E
	Explosive, blasting, type D.	1.1D	UN0084	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Explosive, blasting, type E.	1.1D	UN0241	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E, 19E
	Explosive, blasting, type E *or* Agent blasting, Type E.	1.5D	UN0332	II	1.5D	105, 106	None	62	None	Forbidden	Forbidden	B	1E,5E
	Explosive, forbidden. See sec. 173.54.	Forbidden			.....	.....	.....	.....	.....	.....	.....	.....	

Explosives, slurry, see Explosive, blasting, type E.														
Explosives, water gels, see Explosive, blasting, type E.														
	3	UN1169	II	3	T7,T30	150	202	242	5 L	60 L	B			
Extracts, aromatic, liquid.	3	UN1169	III	3	B1,T7,T30	150	203	242	60 L	220 L	A			
Extracts, aromatic, liquid.	3	UN1197	II	3	T7,T30	150	202	242	5 L	60 L	B			
Extracts, flavoring, liquid.	3	UN1197	III	3	B1,T7,T30	150	203	242	60 L	220 L	A			
Fabric with animal or vegetable oil, see Fibers *or* fabrics, *etc.*														
Ferric arsenate.	6.1	UN1606	II	6.1		None	212	242	25 kg	100 kg	A			
Ferric arsenite.	6.1	UN1607	II	6.1		None	212	242	25 kg	100 kg	A			
Ferric chloride, anhydrous.	8	UN1773	III	8		154	213	240	25 kg	100 kg	A			
Ferric chloride, solution.	8	UN2582	III	8	B15,T8	154	203	241	5 L	60 L	A			
Ferric nitrate.	5.1	UN1466	III	5.1	A1,A29	152	213	240	25 kg	100 kg	A			
Ferrocerium.	4.1	UN1323	II	4.1	59,A19	151	212	240	15 kg	50 kg	A			
Ferrosilicon, *with 30 percent or more but less than 90 percent silicon.*	4.3	UN1408	III	4.3, 6.1	A1,A19	151	213	240	25 kg	100 kg	A	13, 40, 85, 103		
Ferrous arsenate.	6.1	UN1608	II	6.1		None	212	242	25 kg	100 kg	A			
D Ferrous chloride, solid.	8	NA1759	II	8		154	212	240	15 kg	50 kg	A			
D Ferrous chloride, solution.	8	NA1760	II	8	B3	154	202	242	1 L	30 L	B	40		
Ferrous metal borings *or* Ferrous metal shavings *or* Ferrous metal turnings *or* Ferrous metal cuttings *in a form liable to self-heating.*	4.2	UN2793	III	4.2	A1,A19,B101	None	213	241	25 kg	100 kg	A			
Fertilizer ammoniating solution *with free ammonia.*	2.2	UN1043		2.2		306	304	314, 315	Forbidden	150 kg	E	40		
Fibers *or* Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s.	4.1	UN1353	III	4.1	A1	None	213	240	25 kg	100 kg	D			
AIW Fibers *or* Fabrics, animal *or* vegetable *or* Synthetic, n.o.s. *with animal or vegetable oil.*	4.2	UN1373	III	4.2		None	213	241	Forbidden	Forbidden	A			
Films, nitrocellulose base, *gelatine coated (except scrap).*	4.1	UN1324	III	4.1		None	183	None	25 kg	100 kg	D	91		

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	Identification Numbers (4)	PG (5)	Label Codes (6)	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	Other (10B)
	Films, nitrocellulose base, from which gelatine has been removed; film scrap, see Celluloid scrap.	.....	.....		.....		.....	.....	.....	.....	.....		
	Fire extinguisher charges, *corrosive liquid.*	8	UN1774	II	8	N41	154	202	None	1 L	30 L	A	
	Fire extinguisher charges, expelling, explosive, see Cartridges, power device.	.....	.....		.....		.....	.....	.....	.....	.....		
	Fire extinguishers *containing compressed or liquefied gas.*	2.2	UN1044		2.2		309	309	None	75 kg	150 kg	A	
	Firelighters, solid *with flammable liquid.*	4.1	UN2623	III	4.1	A1,A19	None	213	None	25 kg	100 kg	A	
	Fireworks.	1.1G	UN0333	II	1.1G	108	None	62	None	Forbidden	Forbidden	B	
	Fireworks.	1.2G	UN0334	II	1.2G	108	None	62	None	Forbidden	Forbidden	B	
	Fireworks.	1.3G	UN0335	II	1.3G	108	None	62	None	Forbidden	Forbidden	B	24E
	Fireworks.	1.4G	UN0336	II	1.4G	108	None	62	None	Forbidden	75 kg	A	
	Fireworks.	1.4S	UN0337	II	1.4S	108	None	62	None	25 kg	100 kg	A	
W	Fish meal, stabilized *or* Fish scrap, stabilized.	9	UN2216	III	None		155	218	218	No limit	No limit	A	88
	Fish meal, unstabilized *or* Fish scrap, unstabilized.	4.2	UN1374	II	4.2	A1,A19	None	212	241	15 kg	50 kg	A	119, 120
	Fissile radioactive materials, see Radioactive material, fissile, n.o.s.	.....	.....		.....		.....	.....	.....	.....	.....		
	Flammable compressed gas (small receptacles not fitted with a dispersion device, not refillable), see Receptacles, *etc.*	.....	.....		.....		.....	.....	.....	.....	.....		

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	Location (10A)	Other (10B)
	Flammable solids, organic, n.o.s.	4.1	UN1325	II	4.1	A1	151	212	240	15 kg	50 kg	B	
	Flammable solids, organic, n.o.s.	4.1	UN1325	III	4.1	A1	151	213	240	25 kg	100 kg	B	
	Flammable solids, toxic, organic, n.o.s.	4.1	UN2926	II	4.1, 6.1	A1,B106	None	212	242	15 kg	50 kg	B	40
	Flammable solids, toxic, organic, n.o.s.	4.1	UN2926	III	4.1, 6.1	A1,B106	151	213	242	25 kg	100 kg	B	40
	Flares, aerial.	1.4S	UN0404	II	1.4S.		None	62	None	25 kg	100 kg	A	
	Flares, aerial.	1.1G	UN0420	II	1.1G.		None	62	None	Forbidden	Forbidden	B	
	Flares, aerial.	1.4G	UN0403	II	1.4G.		None	62	None	Forbidden	75 kg	A	24E
	Flares, aerial.	1.3G	UN0093	II	1.3G.		None	62	None	Forbidden	75 kg	B	
	Flares, aerial.	1.2G	UN0421	II	1.2G.		None	62	None	Forbidden	Forbidden	B	
	Flares, airplane, see Flares, aerial.												
	Flares, signal, see Cartridges, signal.												
	Flares, surface.	1.3G	UN0092	II	1.3G.		None	62	None	Forbidden	75 kg	B	
	Flares, surface.	1.1G	UN0418	II	1.1G.		None	62	None	Forbidden	Forbidden	B	
	Flares, surface.	1.2G	UN0419	II	1.2G.		None	62	None	Forbidden	Forbidden	B	
	Flares, water-activated, see Contrivances, water-activated, *etc.*												
	Flash powder.	1.1G	UN0094	II	1.1G.		None	62	None	Forbidden	Forbidden	E	1E,5E
	Flash powder.	1.3G	UN0305	II	1.3G.		None	62	None	Forbidden	Forbidden	E	1E,5E
	Flue dusts, poisonous, see Arsenical dust.												
	Fluoric acid, see Hydrofluoric acid, solution, *etc.*												
	Fluorine, compressed.	2.3	UN1045		2.3, 5.1, 8	1	None	302	None	Forbidden	Forbidden	D	40, 89, 90
	Fluoroacetic acid.	6.1	UN2642	I	6.1	B100	None	211	242	1 kg	15 kg	E	

Fluoroanilines.	6.1	UN2941	III	6.1	T8	153	203	241	60 L	220 L	A			
Fluorobenzene.	3	UN2387	II	3	B101,T8	150	202	242	5 L	60 L	B			
Fluoroboric acid.	8	UN1775	II	8	A6,A7,B2,B15, N3,N34,T15,T27	154	202	242	1 L	30 L	A			
Fluorophosphoric acid anhydrous.	8	UN1776	II	8	A6,A7,B2,N3, N34,T9,T27	None	202	242	1 L	30 L	A	26		
Fluorosilicates, n.o.s.	6.1	UN2856	III	6.1		153	213	240	100 kg	200 kg	A			
Fluorosilicic acid.	8	UN1778	II	8	A6,A7,B2,B15, N3,N34,T12,T27	None	202	242	1 L	30 L	A			
Fluorosulfonic acid.	8	UN1777	I	8	A3,A6,A7,A10, B6,B10,N3,T9, T27	None	201	243	0.5 L	2.5 L	D	40		
Fluorotoluenes.	3	UN2388	II	3	T8	150	202	242	5 L	60 L	B	40		
Forbidden materials. See 173.21.	Forbidden													
Formaldehyde, solutions, *with not less than 25 percent formaldehyde.*	8	UN2209	III	8	T1	154	203	241	5 L	60 L	A			
Formaldehyde, solutions, flammable.	3	UN1198	III	3, 8	B1,T8	150	203	242	5 L	60 L	A	40		
Formalin, see Formaldehyde, solutions.														
Formic acid.	8	UN1779	II	8	B2,B12,B28,T8	154	202	242	1 L	30 L	A	40		
Fracturing devices, explosive, *without detonators for oil wells.*	1.1D	UN0099	II	1.1D		None	62	None	Forbidden	Forbidden	B			
D Fuel oil *(No. 1, 2, 4, 5, or 6).*	3	NA1993	III	3	B1	150	203	242	60 L	220 L	A			
Fuel, aviation, turbine engine.	3	UN1863	I	3	T7	150	201	243	1 L	30 L	E			
Fuel, aviation, turbine engine.	3	UN1863	II	3	T1	150	202	242	5 L	60 L	B			
Fuel, aviation, turbine engine.	3	UN1863	III	3	B1,T1	150	203	242	60 L	220 L	A			
Fulminate of mercury (dry).	Forbidden													
Fulminate of mercury, wet, see Mercury fulminate, *etc.*														
Fulminating gold.	Forbidden													
Fulminating mercury.	Forbidden													
Fulminating platinum.	Forbidden													
Fulminating silver.	Forbidden													
Fulminic acid.	Forbidden													
Fumaryl chloride.	8	UN1780	II	8	B2,T8,T26	154	202	242	1 L	30 L	C	8, 40		

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Furaldehydes.	6.1	UN1199	II	6.1, 3	T15	None	202	243	5 L	60 L	A	
	Furan.	3	UN2389	I	3	T18	None	201	243	1 L	30 L	E	40
	Furfuryl alcohol.	6.1	UN2874	III	6.1	T2	153	203	241	60 L	220 L	A	26, 74
	Furfurylamine.	3	UN2526	III	3, 8	B1,T1	150	203	242	5 L	60 L	A	40
	Fuse, detonating, *metal clad, see* Cord, detonating, *metal clad.*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Fuse, detonating, mild effect, *metal clad, see* Cord, detonating, mild effect, *metal clad.*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24E
	Fuse, igniter *tubular metal clad.*	1.4G	UN0103	II	1.4G		None	62	None	Forbidden	75 kg	A	
	Fuse, non-detonating *(instantaneous or quickmatch).*	1.3G	UN0101	II	1.3G		None	62	None	Forbidden	Forbidden	B	
	Fuse, safety.	1.4S	UN0105	II	1.4S		None	62	None	25 kg	100 kg	A	
D	Fusee *(railway or highway).*	4.1	NA1325	II	4.1		None	184	None	15 kg	50 kg	B	
	Fusel oil.	3	UN1201	II	3	T1	150	202	242	5 L	60 L	B	
	Fusel oil.	3	UN1201	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Fuses, tracer, see Tracers for ammunition.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Fuzes, combination, percussion and time, see Fuzes, detonating *(UN 0257, UN 0367);* Fuzes, igniting (UN 0317, UN 0368).	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Fuzes, detonating.	1.4S	UN0367	II	1.4S	116	None	62	None	25 kg	100 kg	A	24E
	Fuzes, detonating.	1.4B	UN0257	II	1.4B	116	None	62	None	Forbidden	75 kg	A	
	Fuzes, detonating.	1.2B	UN0107	II	1.2B		None	62	None	Forbidden	Forbidden	B	2E,6E
	Fuzes, detonating.	1.1B	UN0106	II	1.1B		None	62	None	Forbidden	Forbidden	B	2E,6E
	Fuzes, detonating, *with protective features.*	1.2D	UN0409	II	1.2D		None	62	None	Forbidden	Forbidden	B	

	Fuzes, detonating, *with protective features.*	1.4D	UN0410	II	1.4D.	116	None.	62	None.	Forbidden	75 kg	A	24E	
	Fuzes, detonating, *with protective features.*	1.1D	UN0408	II	1.1D.		None.	62	None.	Forbidden	Forbidden	B		
	Fuzes, igniting.	1.3G	UN0316	II	1.3G.		None.	62	None.	Forbidden	Forbidden	B	24E	
	Fuzes, igniting.	1.4G	UN0317	II	1.4G.		None.	62	None.	Forbidden	75 kg	A		
	Fuzes, igniting.	1.4S	UN0368	II	1.4S.		None.	62	None.	25 kg	100 kg	A		
	Galactsan trinitrate.	Forbidden												
	Gallium.	8	UN2803	III	8		None.	162	240	20 kg	20 kg	B	48	
	Gas cartridges, *(flammable) without a release device, non-refillable.*	2.1	UN2037		2.1		306	304	None.	1 kg	15 kg	B	40	
	Gas generator assemblies (aircraft), *containing a non-flammable non-toxic gas and a propellant cartridge.*	2.2	None		2.2		None.	335	None.	75 kg	150 kg	A		
D	Gas identification set.	2.3	NA9035		2.3	6	None.	194	None.	Forbidden	Forbidden	D		
	Gas oil *or* Diesel fuel *or* Heating oil, light.	3	UN1202	III	3	B1,T7,T30	150	203	242	60 L	220 L	A		
	Gas, refrigerated liquid, flammable, n.o.s. *(cryogenic liquid).*	2.1	UN3312		2.1		None.	316	318	Forbidden	Forbidden	D	40	
	Gas, refrigerated liquid, n.o.s. *(cryogenic liquid).*	2.2	UN3158		2.2		320	316	318	50 kg	500 kg	D		
	Gas, refrigerated liquid, oxidizing, n.o.s. *(cryogenic liquid).*	2.2	UN3311		2.2, 5.1		320	316	318	Forbidden	Forbidden	D		
	Gas sample, non-pressurized, flammable, n.o.s., *not refrigerated liquid.*	2.1	UN3167		2.1		306	302, 304	None.	1 L	5 L	D		
	Gas sample, non-pressurized, toxic, flammable, n.o.s., *not refrigerated liquid.*	2.3	UN3168		2.3, 2.1		306	302	None.	Forbidden	1 L	D		
	Gas sample, non-pressurized, toxic, n.o.s., *not refrigerated liquid.*	2.3	UN3169		2.3		306	302, 304	None.	Forbidden	1 L	D		
D	Gasohol *gasoline mixed with ethyl alcohol, with not more than 20 percent alcohol.*	3	NA1203	II	3		150	202	242	5 L	60 L	E		
	Gasoline.	3	UN1203	II	3	B33,B101,T8	150	202	242	5 L	60 L	E		

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	Hazardous materials descriptions and proper shipping names (2)	Hazard class or division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Gasoline, casinghead, see Gasoline.	.....	.....		.....		.....	.....	.....	.....	.....	.....	
	Gelatine dynamites, see Explosive, blasting, type A.	.....	.....		.....		.....	.....	.....	.....	.....	.....	
	Gelatine, blasting, see Explosive, blasting, type A.	.....	.....		.....		.....	.....	.....	.....	.....	.....	
	Germane.	2.3	UN2192		2.3, 2.1	2	None	192	245	Forbidden	Forbidden	D	40
	Glycerol alpha-monochlorohydrin.	6.1	UN2689	III	6.1	T2	153	203	241	60 L	220 L	A	
	Glyceryl gluconate trinitrate.	Forbidden			.....		.....	.....	.....	.....	.....	.....	
	Glyceryl lactate trinitrate.	Forbidden			.....		.....	.....	.....	.....	.....	.....	
	Glyceryl-1,3-dinitrate.	Forbidden			.....		.....	.....	.....	.....	.....	.....	
	Glyceryl trinitrate, see Nitroglycerin, etc.	.....	.....		.....		.....	.....	.....	.....	.....	.....	
	Glycidaldehyde.	3	UN2622	II	3, 6.1	T8	150	202	243	1 L	60 L	A	40
	Grenades practice *Hand or rifle.*	1.4G	UN0452	II	1.4G.		.....	62	None	Forbidden	75 kg	A	24E
	Grenades, *hand or rifle, with bursting charge.*	1.1D	UN0284	II	1.1D.		.....	62	None	Forbidden	Forbidden	B	
	Grenades, *hand or rifle, with bursting charge.*	1.2D	UN0285	II	1.2D.		.....	62	None	Forbidden	Forbidden	B	
	Grenades, *hand or rifle, with bursting charge.*	1.1F	UN0292	II	1.1F.		.....	62	None	Forbidden	Forbidden	E	
	Grenades, *hand or rifle, with bursting charge.*	1.2F	UN0293	II	1.2F.		.....	62	None	Forbidden	Forbidden	E	
D	Grenades, empty primed.	1.4S	NA0349	II	None		None	62	None	25 kg	100 kg	A	
	Grenades, illuminating, see Ammunition, illuminating, *etc.*	.....	.....		.....		.....	.....	.....	.....	.....	.....	
	Grenades, practice, *hand or rifle.*	1.2G	UN0372	II	1.2G.		.....	62	None	Forbidden	Forbidden	B	
	Grenades, practice, *hand or rifle.*	1.4S	UN0110	II	1.4S.		.....	62	None	25 kg	100 kg	A	

Grenades, practice, *hand or rifle.*	1.3G	UN0318	II	1.3G		.....	62	None	Forbidden	Forbidden	B	
Grenades, smoke, see Ammunition, smoke, *etc.*	.....			.....		.....	.....	.....	.....	.....		
Guanidine nitrate.	5.1	UN1467	III	5.1	A1		152	240	25 kg	100 kg	A	73
Guanyl nitrosaminoguanylidene hydrazine (dry).	Forbidden			.....			.....	.....	.....	.....		
Guanyl nitrosaminoguanylidene hydrazine, wetted *with not less than 30 percent water, by mass.*	1.1A	UN0113	II	1.1A	111, 117		None	62	Forbidden	Forbidden	E	2E,6E
Guanyl nitrosaminoguanyltetrazene (dry).	Forbidden			.....			.....	.....	.....	.....		
Guanyl nitrosaminoguanyltetrazene, wetted *or* Tetrazene, wetted *with not less than 30 percent water or mixture of alcohol and water, by mass.*	1.1A	UN0114	II	1.1A	111, 117		None	62	Forbidden	Forbidden	E	2E,6E
Gunpowder, *granular or as a meal, see* Black powder *(UN 0027).*	.....	.....		.....			.....	.....	.....	.....		
Gunpowder, compressed *or* Gunpowder in pellets, *see* Black powder *(UN 0028).*	.....	.....		.....			.....	.....	.....	.....		
Hafnium powder, dry.	4.2	UN2545	I	4.2	B100		None	211	Forbidden	Forbidden	D	
Hafnium powder, dry.	4.2	UN2545	II	4.2	A19,A20,B101, B106,N34		None	212	15 kg	50 kg	D	
Hafnium powder, dry.	4.2	UN2545	III	4.2	B105,B106		None	213	25 kg	100 kg	D	
Hafnium 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	UN1326	II	4.1	A6,A19,A20,N34		None	212	15 kg	50 kg	E	
Hand signal device, see Signal devices, hand.	.....	.....		.....			.....	.....	.....	.....		
Hazardous substances, liquid or solid, n.o.s., see Environmentally hazardous substances, *etc.*	.....	.....		.....			.....	.....	.....	.....		
Hazardous waste, liquid, n.o.s.	9	NA3082	III	9			155	203	No limit	No limit	A	

HazMat Table

	Hexafluoroethane, compressed *or* Refrigerant gas, R 116.	2.2	UN2193		2.2		306	304	314, 315	75 kg	150 kg	A			
	Hexafluorophosphoric acid.	8	UN1782	II	8	A6,A7,B2,N3, N34,T9,T27	None	202	242	1 L	30 L	A			
D	Hexafluoropropylene oxide.	2.2	NA1956		2.2		306	304	314, 315	75 kg	150 kg	A			
	Hexafluoropropylene, compressed *or* Refrigerant gas, R 1216.	2.2	UN1858		2.2		306	304	314, 315	75 kg	150 kg	A			
	Hexaldehyde.	3	UN1207	III	3	B1,T1	150	203	242	60 L	220 L	A			
	Hexamethylene diisocyanate.	6.1	UN2281	II	6.1	B101,T14	None	202	243	5 L	60 L	B	13, 40		
	Hexamethylene triperoxide diamine (dry).	Forbidden													
	Hexamethylenediamine solution.	8	UN1783	II	8	T8	None	202	242	1 L	30 L	A			
	Hexamethylenediamine solution.	8	UN1783	III	8	T7	154	203	241	5 L	60 L	A			
	Hexamethylenediamine, solid.	8	UN2280	III	8		154	213	240	25 kg	100 kg	A	12		
	Hexamethyleneimine.	3	UN2493	II	3, 8	B101,T8	None	202	243	1 L	5 L	B	40		
	Hexamethylenetetramine.	4.1	UN1328	III	4.1	A1	151	213	240	25 kg	100 kg	A			
	Hexamethylol benzene hexanitrate.	Forbidden													
	Hexanes.	3	UN1208	II	3	B101,T8	150	202	242	5 L	60 L	E			
	2,2',4,4',6,6'-Hexanitro-3,3'-dihydroxyazobenzene (dry).	Forbidden													
	Hexanitroazoxy benzene.	Forbidden													
	Hexanitrodiphenyl urea.	Forbidden													
	N,N'-(hexanitrodiphenyl) ethylene dinitramine (dry).	Forbidden													
	Hexanitrodiphenylamine *or* Dipicrylamine *or* Hexyl.	1.1D	UN0079	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E		
	2,2',3',4,4',6-Hexanitrodiphenylamine.	Forbidden													
	2,3',4,4',6,6'-Hexanitrodiphenylether.	Forbidden													
	Hexanitroethane.	Forbidden													
	Hexanitrooxanilide.	Forbidden													
	Hexanitrostilbene.	1.1D	UN0392	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E		
	Hexanoic acid, see Corrosive liquids, n.o.s.														
	Hexanols.	3	UN2282	III	3	B1,T1	150	203	242	60 L	220 L	A			

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	Identification Numbers (4)	PG (5)	Label Codes (6)	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	Other (10B)
	1-Hexene.	3	UN2370	II	3	B101,T8	150	202	242	5 L	60 L	E	
	Hexogen and cyclotetramethylenetetranitramine mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc.*												
	Hexogen and HMX mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc.*												
	Hexogen and octogen mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc.*												
	Hexogen, *see* Cyclotrimethylenetrinitramine, *etc.*												
	Hexolite, *or* Hexotol *dry or wetted with less than 15 percent water, by mass.*	1.1D	UN0118	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Hexotonal.	1.1D	UN0393	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Hexyl, *see* Hexanitrodiphenylamine.												
	Hexyltrichlorosilane.	8	UN1784	II	8	A7,B2,B6,N34,T8,T26	None	202	242	Forbidden	30 L	C	40
	High explosives, see individual explosives' entries.												
	HMX, *see* Cyclotetramethylenetetranitramine, *etc.*												
	Hydrazine azide.	Forbidden											
	Hydrazine chlorate.	Forbidden											
	Hydrazine dicarbonic acid diazide.	Forbidden											

	Hydroxylamine sulfate.	8	UN2865	III	8		154	213	240	25 kg	100 kg	A	
	Hypochlorite solutions.	8	UN1791	II	8	A7,B2,B15,N34, T7	154	202	242	1 L	30 L	B	26
	Hypochlorite solutions.	8	UN1791	III	8	B104,N34,T7	154	203	241	5 L	60 L	B	26
	Hypochlorites, inorganic, n.o.s.	5.1	UN3212	II	5.1		152	212	240	5 kg	25 kg	D	48, 56, 58, 69, 106, 116, 118
	Hyponitrous acid.	Forbidden			....		....	....	....	....	....		
	Igniter fuse, metal clad, see Fuse, igniter, tubular, metal clad.	....			....		....	....	....	....	....		
	Igniters.	1.2G	UN0314	II	1.2G		None	62	None	Forbidden	Forbidden	B	
	Igniters.	1.4S	UN0454	II	1.4S		None	62	None	25 kg	100 kg	A	
	Igniters.	1.1G	UN0121	II	1.1G		None	62	None	Forbidden	Forbidden	B	
	Igniters.	1.4G	UN0325	II	1.4G		None	62	None	Forbidden	75 kg	A	24E
	Igniters.	1.3G	UN0315	II	1.3G		None	62	None	Forbidden	Forbidden	A	
	3,3'-Iminodipropylamine.	8	UN2269	III	8	T8	154	203	241	5 L	60 L	A	
	Infectious substances, affecting animals *only.*	6.2	UN2900		6.2		134	196	None	50 mL or 50 g	4 L or 4 kg	B	
	Infectious substances, affecting humans.	6.2	UN2814		6.2		134	196	None	50 mL or 50 g	4 L or 4 kg	B	
	Inflammable, see Flammable.	....			....		....	....	....	....	....		
	Initiating explosives (dry).	Forbidden			....		....	....	....	....	....		
	Inositol hexanitrate (dry).	Forbidden			....		....	....	....	....	....		
D	Insecticide gases *flammable* n.o.s.	2.1	NA1954		2.1		306	304	314, 315	75 kg	150 kg	D	
	Insecticide gases, n.o.s.	2.2	UN1968		2.2		306	304	314, 315	75 kg	150 kg	A	
	Insecticide gases, toxic, n.o.s.	2.3	UN1967		2.3	3	None	193, 334	245	Forbidden	Forbidden	D	40
	Inulin trinitrate (dry).	Forbidden			....		....	....	....				
	Iodine azide (dry).	Forbidden			....		....	....	....				
	Iodine monochloride.	8	UN1792	II	8	B6,N41,T8,T26	None	212	240	Forbidden	50 kg	D	40, 66, 74, 89, 90

HazMat Table

	Isopropyl chloroformate.	6.1	UN2407	I	6.1, 3, 8	2,B9,B14,B32, B74,B77,T38, T43,T45	None	227	244	Forbidden	Forbidden	B	40
	Isopropyl isobutyrate.	3	UN2406	II	3	T1	150	202	242	5 L	60 L	B	
+	Isopropyl isocyanate.	3	UN2483	I	3, 6.1	1,B9,B14,B30, B72,T38,T43, T44	None	226	244	Forbidden	Forbidden	D	40
	Isopropyl mercaptan, see Propanethiols.												
	Isopropyl nitrate.	3	UN1222	II	3	T25	150	202	None	5 L	60 L	D	
	Isopropyl phosphoric acid, see Isopropyl acid phosphate.												
	Isopropyl propionate.	3	UN2409	II	3	T1	150	202	242	5 L	60 L	B	
	Isopropylamine.	3	UN1221	I	3, 8	T20	None	201	243	0.5 L	2.5 L	E	
	Isopropylbenzene.	3	UN1918	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Isopropylcumyl hydroperoxide, with more than 72 percent in solution.	Forbidden											
	Isosorbide dinitrate mixture *with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate.*	4.1	UN2907	II	4.1	66	None	212	None	15 kg	50 kg	E	
	Isosorbide-5-mononitrate.	4.1	UN3251	III	4.1		151	213	240	Forbidden	Forbidden	D	12
	Isothiocyanic acid.	Forbidden											
	Jet fuel, see Fuel aviation, turbine engine.												
D	Jet perforating guns, charged oil well, with detonator.	1.1D	NA0124	II	1.1D	55, 56	None	62	None	Forbidden	Forbidden	A	24E
D	Jet perforating guns, charged oil well, with detonator.	1.4D	NA0494	II	1.4D	55, 56	None	62	None	Forbidden	Forbidden	B	
	Jet perforating guns, charged, *oil well, without detonator.*	1.1D	UN0124	II	1.1D	55	None	62	None	Forbidden	Forbidden	B	
	Jet perforating guns, charged, *oil well, without detonator.*	1.4D	UN0494	II	1.4D	55, 114	None	62	None	Forbidden	300 kg	A	24E
	Jet perforators, see Charges, shaped, commercial *etc.*												
	Jet tappers, without detonator, see Charges, shaped commercial, *etc.*												

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class of division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.**)			(9) Quantity limitations			(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only		Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)		(10A)	(10B)
	Jet thrust igniters, for rocket motors or Jato, see Igniters.	.....			.....		.....	.....	.....	.....	.....			
	Jet thrust unit (Jato), see Rocket motors.	.....			.....		.....	.....	.....	.....	.....			
	Kerosene.	3	UN1223	III	3	B1,T1	150	203	242	60 L	220 L	A		
	Ketones, liquid, n.o.s.	3	UN1224	I	3	T8,T31	None	201	243	1 L	30 L	E		
	Ketones, liquid, n.o.s.	3	UN1224	II	3	T8,T31	150	202	242	5 L	60 L	B		
	Ketones, liquid, n.o.s.	3	UN1224	III	3	B1,T7,T30	150	203	242	60 L	220 L	A		
	Krypton, compressed.	2.2	UN1056		2.2		306	302	None	75 kg	150 kg	A		
	Krypton, refrigerated liquid *(cryogenic liquid).*	2.2	UN1970		2.2		320	None	None	50 kg	500 kg	B		
	Lacquer base or lacquer chips, nitrocellulose, dry, see Nitrocellulose, etc. *(UN 2557).*	.....			.....		.....	.....	.....	.....	.....			
	Lacquer base or lacquer chips, plastic, wet with alcohol or solvent, see Nitrocellulose *(UN 2059, UN 2060, UN 2555, UN 2556)* or Paint etc. *(UN 1263).*	.....			.....		.....	.....	.....	.....	.....			
	Lead acetate.	6.1	UN1616	III	6.1		153	213	240	100 kg	200 kg	A		
	Lead arsenates.	6.1	UN1617	II	6.1		None	212	242	25 kg	100 kg	A		
	Lead arsenites.	6.1	UN1618	II	6.1		None	212	242	25 kg	100 kg	A		
	Lead azide (dry).	Forbidden			.....		.....	.....	.....	.....	.....			
	Lead azide, wetted *with not less than 20 percent water or mixture of alcohol and water, by mass.*	1.1A	UN0129	II	1.1A	111, 117	None	62	None	Forbidden	Forbidden	E	2E,6E	
	Lead compounds, soluble, n.o.s.	6.1	UN2291	III	6.1		153	213	240	100 kg	200 kg	A		
	Lead cyanide.	6.1	UN1620	II	6.1		None	212	242	25 kg	100 kg	A	26	
	Lead dioxide.	5.1	UN1872	III	5.1	A1	152	213	240	25 kg	100 kg	A	34	

	Lead dross, see Lead sulfate, *with more than 3 percent free acid.*	.....			.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	
D	Lead mononitroresorcinate.	1.1A	NA0473	II	1.1A	111, 117	None	62	None	Forbidden	Forbidden	E				2E,6E
	Lead nitrate.	5.1	UN1469	II	5.1, 6.1		None	212	242	5 kg	25 kg	A				
	Lead nitroresorcinate (dry).	Forbidden	.....		.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Lead perchlorate, solid.	5.1	UN1470	II	5.1, 6.1	T8	None	212	242	5 kg	25 kg	A				56, 58, 106
	Lead perchlorate, solution.	5.1	UN1470	II	5.1, 6.1	T8	None	202	243	1 L	5 L	A				56, 58, 106
	Lead peroxide, see Lead dioxide.	.....	.....		.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Lead phosphite, dibasic.	4.1	UN2989	II	4.1		None	212	240	5 kg	25 kg	B				34
	Lead phosphite, dibasic.	4.1	UN2989	III	4.1		151	213	240	15 kg	50 kg	B				34
	Lead picrate (dry).	Forbidden	.....		.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Lead styphnate (dry).	Forbidden	.....		.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Lead styphnate, wetted *or* Lead trinitroresorcinate, wetted *with not less than 20 percent water or mixture of alcohol and water, by mass.*	1.1A	UN0130	II	1.1A	111, 117	None	62	None	Forbidden	Forbidden	E				2E,6E
	Lead sulfate *with more than 3 percent free acid.*	8	UN1794	II	8		154	212	240	15 kg	50 kg	A				
	Lead trinitroresorcinate, *see* Lead styphnate, *etc.*	.....	.....		.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Life-saving appliances, not self inflating *containing dangerous goods as equipment.*	9	UN3072		None		None	219	None	No limit	No limit	A				
	Life-saving appliances, self inflating.	9	UN2990		None		None	219	None	No limit	No limit	A				
	Lighter replacement cartridges containing liquefied petroleum gases (and similar devices, each not exceeding 65 grams), see Lighters *or* lighter refills*etc. containing flammable gas.*	.....	.....		.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Lighters *or* Lighter refills *cigarettes, containing flammable gas.*	2.1	UN1057		2.1	N10	None	21, 308	None	1 kg	15 kg	B				40
D	Lighters for cigars, cigarettes, *etc., with lighter fluids.*	3	NA1226	II	3	N10	None	21	None	Forbidden	Forbidden	B				

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Lighters, fuse.	1.4S	UN0131	II	1.4S		None	62	None	25 kg	100 kg	A	
	Lime, unslaked, see Calcium oxide.												
I	Liquefied gas toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone B.*	2.3	UN3309		2.3, 2.1, 8	2	None	304	314, 315	Forbidden	Forbidden	D	17, 40
	Liquefied gas, flammable, n.o.s.	2.1	UN3161		2.1		306	304	314, 315	Forbidden	150 kg	D	40
	Liquefied gas, n.o.s.	2.2	UN3163		2.2		306	304	314, 315	75 kg	150 kg	A	
	Liquefied gas, oxidizing, n.o.s.	2.2	UN3157		2.2, 5.1		306	304	314, 315	75 kg	150 kg	D	
I	Liquefied gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone A.*	2.3	UN3308		2.3, 8	1	None	192	245	Forbidden	Forbidden	D	40
I	Liquefied gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone B.*	2.3	UN3308		2.3, 8	2	None	304	314, 315	Forbidden	Forbidden	D	40
I	Liquefied gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone C.*	2.3	UN3308		2.3, 8	3	None	304	314, 315	Forbidden	Forbidden	D	40
I	Liquefied gas, toxic, corrosive, n.o.s. *Inhalation Hazard Zone D.*	2.3	UN3308		2.3, 8	4	None	304	314, 315	Forbidden	Forbidden	D	40
I	Liquefied gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone A.*	2.3	UN3309		2.3, 2.1, 8	1	None	192	245	Forbidden	Forbidden	D	17, 40
I	Liquefied gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone B.*	2.3	UN3309		2.3, 2.1, 8	2	None	304	314, 315	Forbidden	Forbidden	D	17, 40
I	Liquefied gas, toxic, flammable, corrosive, n.o.s. *Inhalation Hazard Zone C.*	2.3	UN3309		2.3, 2.1, 8	3	None	304	314, 315	Forbidden	Forbidden	D	17, 40

Malononitrile.	6.1	UN2647	II	6.1		None	212	242	25 kg	100 kg	A		12
Mancozeb (manganese ethylenebisdithiocarbamate complex with zinc) see Maneb.													
Maneb *or* Maneb preparations *with not less than 60 percent maneb.*	4.2	UN2210	III	4.2, 4.3	57,A1,A19,B105	None	213	242	25 kg	100 kg	A		34
Maneb stabilized *or* Maneb preparations, stabilized *against self-heating.*	4.3	UN2968	III	4.3	54,A1,A19,B108	151	213	242	25 kg	100 kg	B		34
Manganese nitrate.	5.1	UN2724	III	5.1	A1	152	213	240	25 kg	100 kg	A		
Manganese resinate.	4.1	UN1330	III	4.1	A1	151	213	240	25 kg	100 kg	A		
Mannitan tetranitrate.	Forbidden												
Mannitol hexanitrate (dry).	Forbidden												
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	1.1D	121	None	62	None	Forbidden	Forbidden	B		1E, 5E
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	4.1		186	186	None	Forbidden	Forbidden	A		
Matches, safety *(book, card or strike on box).*	4.1	UN1944	III	4.1		186	186	None	25 kg	100 kg	A		
Matches, strike anywhere.	4.1	UN1331	III	4.1		186	186	None	Forbidden	Forbidden	B		
Matches, wax, Vesta.	4.1	UN1945	III	4.1		186	186	None	25 kg	100 kg	B		
Matting acid, see Sulfuric acid.													
Medicine, liquid, flammable, toxic, n.o.s.	3	UN3248	II	3, 6.1	36	None	202	None	1 L	5 L	B		40
Medicine, liquid, flammable, toxic, n.o.s.	3	UN3248	III	3, 6.1	36	150	203	None	5 L	5 L	A		
Medicine, liquid, toxic, n.o.s.	6.1	UN1851	II	6.1		153	202	243	5 L	5 L	C		40
Medicine, liquid, toxic, n.o.s.	6.1	UN1851	III	6.1		153	203	241	5 L	5 L	C		40
Medicine, solid, toxic, n.o.s.	6.1	UN3249	II	6.1	36	153	212	None	5 kg	5 kg	C		40
Medicine, solid, toxic, n.o.s.	6.1	UN3249	III	6.1	36	153	213	None	5 kg	5 kg	C		40

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	Identification Numbers (4)	PG (5)	Label Codes (6)	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	Other (10B)
D	Medicines, *corrosive, liquid*, n.o.s.	8	NA1760	II	8	B3	154	202	242	1 L	30 L	B	40
D	Medicines, *corrosive, liquid*, n.o.s.	8	NA1760	III	8		154	203	241	5 L	60 L	A	40
D	Medicines, *corrosive, solid*, n.o.s.	8	NA1759	II	8		154	212	240	15 kg	50 kg	A	
D	Medicines, *corrosive, solid*, n.o.s.	8	NA1759	III	8		154	213	240	25 kg	100 kg	A	
D	Medicines, *flammable, liquid*, n.o.s.	3	NA1993	I	3		150	201	243	1 L	30 L	E	
D	Medicines, *flammable, liquid*, n.o.s.	3	NA1993	II	3		150	202	242	5 L	60 L	B	
D	Medicines, *flammable, liquid*, n.o.s.	3	NA1993	III	3	B1	150	203	242	60 L	220 L	A	
D	Medicines, *flammable, solid*, n.o.s.	4.1	NA1325	II	4.1		151	212	240	15 kg	50 kg	B	
D	Medicines, *oxidizing substance, solid*, n.o.s.	5.1	NA1479	II	5.1		152	212	242	5 kg	25 kg	B	56, 58, 69, 106
	Memtetrahydrophthalic anhydride, see Corrosive liquids, n.o.s.												
	Mercaptans, liquid, flammable, toxic, n.o.s. *or* Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3	UN1228	II	3, 6.1	T13	None	202	243	Forbidden	60 L	B	40, 95
	Mercaptans, liquid, flammable, toxic, n.o.s. *or* Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3	UN1228	III	3, 6.1	B1,T8	150	203	242	5 L	220 L	A	40, 95
	Mercaptans, liquid, toxic, flammable, n.o.s. *or* Mercaptan mixtures, liquid, toxic, flammable, n.o.s., *flash point not less than 23 degrees C.*	6.1	UN3071	II	6.1, 3	T14	None	202	243	5 L	60 L	C	40, 121
	5-Mercaptotetrazol-1-acetic acid.	1.4C	UN0448	II	1.4C		None	62	None	Forbidden	75 kg	A	1E,5E, 24E
	Mercuric arsenate.	6.1	UN1623	II	6.1		None	212	242	25 kg	100 kg	A	
	Mercuric chloride.	6.1	UN1624	II	6.1		None	212	242	25 kg	100 kg	A	

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class of division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations			(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Mercury based pesticides, solid, toxic.	6.1	UN2777	I	6.1		None	211	242	5 kg	50 kg	A	40
	Mercury based pesticides, solid, toxic.	6.1	UN2777	II	6.1		None	212	242	25 kg	100 kg	A	40
	Mercury based pesticides, solid, toxic.	6.1	UN2777	III	6.1		153	213	240	100 kg	200 kg	A	40
	Mercury benzoate.	6.1	UN1631	II	6.1		None	212	242	25 kg	100 kg	A	
	Mercury bromides.	6.1	UN1634	II	6.1		None	212	242	25 kg	100 kg	A	
	Mercury compounds, liquid, n.o.s.	6.1	UN2024	I	6.1		None	201	243	1 L	30 L	B	40
	Mercury compounds, liquid, n.o.s.	6.1	UN2024	II	6.1		None	202	243	5 L	60 L	B	40
	Mercury compounds, liquid, n.o.s.	6.1	UN2024	III	6.1		153	203	241	60 L	220 L	B	40
	Mercury compounds, solid, n.o.s.	6.1	UN2025	I	6.1		None	211	242	5 kg	50 kg	A	
	Mercury compounds, solid, n.o.s.	6.1	UN2025	II	6.1		None	212	242	25 kg	100 kg	A	
	Mercury compounds, solid, n.o.s.	6.1	UN2025	III	6.1		153	213	240	100 kg	200 kg	A	
	Mercury cyanide.	6.1	UN1636	II	6.1	N74,N75	None	212	242	25 kg	100 kg	A	26
	Mercury fulminate, wetted *with not less than 20 percent water, or mixture of alcohol and water, by mass.*	1.1A	UN0135	II	1.1A	111, 117	None	62	None	Forbidden	Forbidden	E	2E,6E
	Mercury gluconate.	6.1	UN1637	II	6.1		None	212	242	25 kg	100 kg	A	
	Mercury iodide aquabasic ammonobasic (Iodide of Million's base).	Forbidden											
	Mercury iodide, *solution.*	6.1	UN1638	II	6.1		None	202	243	5 L	60 L	A	
	Mercury iodide, *solid.*	6.1	UN1638	II	6.1		None	212	242	25 kg	100 kg	A	
	Mercury nitride.	Forbidden											
	Mercury nucleate.	6.1	UN1639	II	6.1		None	212	242	25 kg	100 kg	A	
	Mercury oleate.	6.1	UN1640	II	6.1		None	212	242	25 kg	100 kg	A	
	Mercury oxide.	6.1	UN1641	II	6.1		None	212	242	25 kg	100 kg	A	

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class of division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Methylhydrazine	6.1	UN1244	I	6.1, 3, 8	1,B9,B14,B30, B72,B77,N34, T38,T43,T44	None	226	244	Forbidden	Forbidden	D	21, 40, 49, 100
	4-Methylmorpholine *or* n-methylmorpholine.	3	UN2535	II	3, 8	B6,T8	None	202	243	1 L	5 L	B	40
	Methylpentadienes	3	UN2461	II	3	T7	150	202	242	5 L	60 L	E	
	2-Methylpentan-2-ol	3	UN2560	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Methylpentanes, see Hexanes												
	Methylphenyldichlorosilane	8	UN2437	II	8	T8,T26	154	202	242	1 L	30 L	C	40
	1-Methylpiperidine	3	UN2399	II	3, 8	T8	None	202	243	1 L	5 L	B	
	Methyltetrahydrofuran	3	UN2536	II	3	B101,T7	150	202	242	5 L	60 L	B	
	Methyltrichlorosilane	3	UN1250	I	3, 8	A7,B6,B77,N34, T14,T26	None	201	243	Forbidden	2.5 L	B	40
	alpha-Methylvaleraldehyde	3	UN2367	II	3	B1,T1	150	202	242	5 L	60 L	B	
	Mine rescue equipment containing carbon dioxide, see Carbon dioxide.												
	Mines *with bursting charge*	1.2D	UN0138	II	1.2D			62	None	Forbidden	Forbidden	B	3E,7E
	Mines *with bursting charge*	1.2F	UN0294	II	1.2F			62	None	Forbidden	Forbidden	E	
	Mines *with bursting charge*	1.1F	UN0136	II	1.1F			62	None	Forbidden	Forbidden	E	
	Mines *with bursting charge*	1.1D	UN0137	II	1.1D			62	None	Forbidden	Forbidden	B	3E,7E
	Mixed acid, see Nitrating acid, mixtures *etc.*												
	Mobility aids, see Wheel chair, electric.												
D	Model rocket motor	1.4C	NA0276	II	1.4C	51	None	62	None	Forbidden	75 kg	A	24E
D	Model rocket motor	1.4S	NA0323	II	1.4S	51	None	62	None	25 kg	100 kg	A	9E
	Molybdenum pentachloride	8	UN2508	III	8	T8,T26	154	213	240	25 kg	100 kg	C	40
	Monochloroacetone (unstabilized)	Forbidden											

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Sym-bols	Hazardous materials descriptions and proper shipping names	Hazard class of division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Nitriles, toxic, n.o.s.	6.1	UN3276	I	6.1	5	None	201	243	1 L	30 L	B	
	Nitriles, toxic, n.o.s.	6.1	UN3276	II	6.1	T14	None	202	243	5 L	60 L	B	
	Nitriles, toxic, n.o.s.	6.1	UN3276	III	6.1	T7	153	203	241	60 L	220 L	A	
	Nitrites, inorganic, aqueous solution, n.o.s.	5.1	UN3219	II	5.1	T8	152	202	242	1 L	5 L	B	46, 56, 58
	Nitrites, inorganic, aqueous solution, n.o.s.	5.1	UN3219	III	5.1	T8	152	203	241	2.5 L	30 L	B	46, 56, 58
	Nitrites, inorganic, n.o.s.	5.1	UN2627	II	5.1	33	152	212	None	5 kg	25 kg	A	46, 56, 58
	Nitro isobutane triol trinitrate	Forbidden								Forbidden	Forbidden	B	1E,5E
	Nitro urea	1.1D	UN0147	II	1.1D		None	62	None				
	2-Nitro-2-methylpropanol nitrate	Forbidden								5 L	60 L	A	40
	3-Nitro-4-chlorobenzotrifluoride	6.1	UN2307	II	6.1	T8	None	202	243				
	6-Nitro-4-diazotoluene-3-sulfonic acid (dry)	Forbidden											
	N-Nitro-N-methylglycolamide nitrate	Forbidden											
	N-Nitroaniline	Forbidden											
	Nitroanilines (*o*-; *m*-; *p*-;)	6.1	UN1661	II	6.1	T14	None	212	242	25 kg	100 kg	A	
	Nitroanisole	6.1	UN2730	III	6.1	T8	153	213	240	100 kg	200 kg	A	
	Nitrobenzene	6.1	UN1662	II	6.1	T14	None	202	243	5 L	60 L	A	40
	m-Nitrobenzene diazonium perchlorate	Forbidden											
	Nitrobenzenesulfonic acid	8	UN2305	II	8		154	202	242	1 L	30 L	A	
	Nitrobenzol, see Nitrobenzene												
	5-Nitrobenzotriazol	1.1D	UN0385	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E; 19E
	Nitrobenzotrifluorides	6.1	UN2306	II	6.1	T8	None	202	243	5 L	60 L	A	40
	Nitrobromobenzenes *liquid*	6.1	UN2732	III	6.1	T8,T38	153	203	241	60 L	220 L	A	

Nitrobromobenzenes *solid*	6.1	UN2732	III	6.1		153	213	240	100 kg	200 kg	A		28	
Nitrocellulose membrane filters	4.1	UN3270	II	4.1	43,A1	151	212	240	1 kg	15 kg	D			
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	4.1		151	212	None	1 kg	15 kg	D			
Nitrocellulose with water *with not less than 25 percent water, by mass.*	4.1	UN2555	II	4.1		151	212	None	15 kg	50 kg	E		28	
Nitrocellulose, *dry or wetted with less than 25 percent water (or alcohol), by mass.*	1.1D	UN0340	II	1.1D		None	62	None	Forbidden	Forbidden	B		4E,27 E	
Nitrocellulose, *unmodified or plasticized with less than 18 percent plasticizing substance, by mass.*	1.1D	UN0341	II	1.1D		None	62	None	Forbidden	Forbidden	B		4E,27 E	
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.	4.1	UN2557	II	4.1	44	151	212	None	1 kg	15 kg	D		28	
Nitrocellulose, plasticized *with not less than 18 percent plasticizing substance, by mass.*	1.3C	UN0343	II	1.3C		None	62	None	Forbidden	Forbidden	B		1E,5E	
Nitrocellulose, solution, flammable *with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose.*	3	UN2059	II	3	T8,T31	150	202	242	5 L	60 L	B			
Nitrocellulose, solution, flammable *with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose.*	3	UN2059	III	3	B1,T7,T30	150	203	242	60 L	220 L	A			
Nitrocellulose, wetted *with not less than 25 percent alcohol, by mass.*	1.3C	UN0342	II	1.3C		None	62	None	Forbidden	Forbidden	B		1E,5E	
Nitrochlorobenzene, see Chloronitrobenzenes *etc.*														
Nitrocresols	6.1	UN2446	III	6.1		153	213	240	100 kg	200 kg	A			
Nitroethane	3	UN2842	III	3	B1,T8	150	203	242	60 L	220 L	A			

HazMat Table

Nitroglycerin, desensitized *with not less than 40 percent non-volatile, water-insoluble phlegmatizer, by mass.*	1.1D	UN0143	II	1.1D, 6.1	125	None	62	None	Forbidden	Forbidden	B	1E,4E, 21E
Nitroglycerin, liquid, not desensitized.	Forbidden											
Nitroglycerin mixture *with more than 2 percent but not more than 10 percent nitroglycerin, by mass, desensitized.*	4.1	UN3319	II	4.1	118	None	None	None	Forbidden	0.5 kg	E	
Nitroglycerin, solution in alcohol, *with more than 1 percent but not more than 10 percent nitroglycerin.*	1.1D	UN0144	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E, 21E
Nitroglycerin, solution in alcohol, *with more than 1 percent but not more than 5 percent nitroglycerin.*	3	UN3064	II	3	N8	None	202	None	Forbidden	5 L	E	
Nitroglycerin solution in alcohol *with not more than 1 percent nitroglycerin.*	3	UN1204	II	3	N34,T25	None	202	None	5 L	60 L	B	
Nitroguanidine *or* Picrite, *dry or wetted with less than 20 percent water, by mass.*	1.1D	UN0282	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
Nitroguanidine nitrate	Forbidden											
Nitroguanidine, wetted *or* Picrite, wetted *with not less than 20 percent water, by mass.*	4.1	UN1336	I	4.1	23,A8,A19,A20, N41	None	211	None	1 kg	15 kg	E	28
1-Nitrohydantoin	Forbidden											
Nitrohydrochloric acid	8	UN1798	I	8	A3,B10,N41, T18,T27	None	201	243	Forbidden	2.5 L	D	40, 66, 74, 89, 90
Nitromannite (dry)	Forbidden											
Nitromannite, wetted, *see* Mannitol hexanitrate, *etc.*												
Nitromethane	3	UN1261	II	3	T25	150	202	None	Forbidden	60 L	A	
Nitromuriatic acid, see Nitrohydrochloric acid.												
Nitronaphthalene	4.1	UN2538	III	4.1	A1	151	213	240	25 kg	100 kg	A	
Nitrophenols (*o-; m-; p-;*)	6.1	UN1663	III	6.1	T8,T38	153	213	240	100 kg	200 kg	A	

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	m-Nitrophenyldinitro methane	Forbidden											
	Nitropropanes	3	UN2608	III	3	B1,T1	150	203	242	60 L	220 L	A	34
	p-Nitrosodimethylaniline	4.2	UN1369	II	4.2	A19,A20,B101, N34	None	212	241	15 kg	50 kg	D	
	Nitrostarch, *dry or wetted with less than 20 percent water, by mass.*	1.1D	UN0146	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Nitrostarch, wetted *with not less than 20 percent water, by mass.*	4.1	UN1337	I	4.1	23,A8,A19,A20, N41	None	211	None	1 kg	15 kg	D	28
	Nitrosugars (dry)	Forbidden											
	Nitrosyl chloride	2.3	UN1069		2.3, 8	3,B14	None	304	314, 315	Forbidden	Forbidden	D	40
	Nitrosylsulfuric acid	8	UN2308	II	8	A3,A6,A7,B2, N34,T9,T27	154	202	242	1 L	30 L	D	40, 66, 74, 89, 90
	Nitrotoluenes, *liquid o-; m-; p-;*	6.1	UN1664	II	6.1	T14	None	202	243	5 L	60 L	A	
	Nitrotoluenes, *solid m-, or p-*	6.1	UN1664	II	6.1	T14	None	212	242	25 kg	100 kg	A	
	Nitrotoluidines (mono)	6.1	UN2660	III	6.1		153	213	240	100 kg	200 kg	A	
	Nitrotriazolone *or* NTO	1.1D	UN0490	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Nitrous oxide	2.2	UN1070		2.2, 5.1		306	304	314, 315	75 kg	150 kg	A	40
	Nitrous oxide and carbon dioxide mixtures, see Carbon dioxide and nitrous oxide mixtures.												
	Nitrous oxide, refrigerated liquid	2.2	UN2201		2.2	B6	None	304	314, 315	75 kg	150 kg	B	40
	Nitroxylenes, (o-; m-; p-)	6.1	UN1665	II	6.1	T14	None	202	243	5 L	60 L	A	
	Nitroxylol, see Nitroxylenes												
	Nonanes	3	UN1920	III	3	B1,T1	150	203	242	60 L	220 L	A	

Nonflammable gas, n.o.s., see Compressed *or* Liquefied gases, *etc. (UN 1955, UN 1956).*												
Nonliquefied gases, see Compressed gases, *etc.*												
Nonliquefied hydrocarbon gas, see Hydrocarbon gases, compressed, n.o.s.												
Nonyltrichlorosilane	8	UN1799	II	8	A7,B2,B6,N34, T8,T26	None	202	242	Forbidden	30 L	C	40
2,5-Norbornadiene *or* Bicyclo*2,2,1*hepta-2,5-diene, inhibited.	3	UN2251	II	3		150	202	242	5 L	60 L	D	
2,5-Norbornadiene *or* Bicyclo*2,2,1*hepta-2,5-diene, inhibited.	3	UN2251	II	3		150	202	242	5 L	60 L	D	
Nordhausen acid, see Sulfuric acid, fuming *etc.*												
Octadecyltrichlorosilane	8	UN1800	II	8	A7,B2,B6, N34,T8	None	202	242	Forbidden	30 L	C	40
Octadiene	3	UN2309	II	3	B1,T1	150	202	242	5 L	60 L	B	
1,7-Octadine-3,5-diyne-1,8-dimethoxy-9-octadecynoic acid.	Forbidden											
Octafluorobut-2-ene *or* Refrigerant gas, R 1318.	2.2	UN2422		2.2		None	304	314, 315	75 kg	150 kg	A	
Octafluorocyclobutane *or* Refrigerant gas, RC 318.	2.2	UN1976		2.2		None	304	314, 315	75 kg	150 kg	A	
Octafluoropropane *or* Refrigerant gas, R 218.	2.2	UN2424		2.2		None	304	314, 315	75 kg	150 kg	A	
Octanes.	3	UN1262	II	3	T1	150	202	242	5 L	60 L	B	
Octogen, *see* Cyclotetramethylene tetranitramine, etc.												
Octolite *or* Octol, *dry or wetted with less than 15 percent water, by mass.*	1.1D	UN0266	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
Octonal	1.1D	UN0496	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
Octyl aldehydes, *flammable*	3	UN1191	III	3	B1,T1	150	203	242	60 L	220 L	A	

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class of division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Paraformaldehyde	4.1	UN2213	III	4.1	A1	151	213	240	25 kg	100 kg	A	
	Paraldehyde	3	UN1264	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Paranitroaniline, solid, see Nitroanilines *etc.*												
D	Parathion	6.1	NA2783	I	6.1	T42	None	201	243	Forbidden	1 L	A	40
D	Parathion	6.1	NA2783	II	6.1	T14	None	202	243	Forbidden	5 L	A	40
D	Parathion and compressed gas mixture.	2.3	NA1967		2.3	3	None	334	245	Forbidden	Forbidden	E	40
	Paris green, solid, see Copper acetoarsenite.												
A,W	PCB, *see* Polychlorinated biphenyls												
+	Pentaborane	4.2	UN1380	I	4.2, 6.1	1	None	205	245	Forbidden	Forbidden	D	
	Pentachloroethane	6.1	UN1669	II	6.1	T14	None	202	243	5 L	60 L	A	40
	Pentachlorophenol	6.1	UN3155	II	6.1		None	212	242	25 kg	100 kg	A	
	Pentaerythrite tetranitrate (dry)	Forbidden											
	Pentaerythrite tetranitrate *or* Pentaerythritol tetranitrate *or* PETN, *with not less than 7 percent wax by mass.*	1.1D	UN0411	II	1.1D	120	None	62	None	Forbidden	Forbidden	B	1E,5E
	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.*	1.1D	UN0150	II	1.1D	121	None	62	None	Forbidden	Forbidden	B	1E,5E

Pentaerythritol tetranitrate, *see* Pentaerythrite tetranitrate, *etc.*	.....													
Pentafluoroethane *or* Refrigerant gas, R 125.	2.2	UN3220		2.2		306	304	314, 315	75 kg	150 kg	A			
Pentamethylheptane	3	UN2286	III	3	B1,T1	150	203	242	60 L	220 L	A			
Pentane-2,4-dione	3	UN2310	III	3, 6.1	B1,T1	150	203	242	60 L	220 L	A			
Pentanes	3	UN1265	I	3	T20	150	201	243	1 L	30 L	E			
Pentanes	3	UN1265	II	3	T20	150	202	242	5 L	60 L	E			
Pentanitroaniline (dry)	Forbidden													
1-Pentene *(n-amylene)*	3	UN1108	I	3	T14	150	201	243	1 L	30 L	E			
1-Pentol	8	UN2705	II	8	B2,T8	154	202	242	1 L	30 L	B			38
Pentolite, *dry or wetted with less than 15 percent water, by mass.*	1.1D	UN0151	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Perchlorates, inorganic, aqueous solution, n.o.s.	5.1	UN3211	II	5.1	T8	152	202	242	1 L	5 L	B			46,56, 58
Perchlorates, inorganic, aqueous solution, n.o.s.	5.1	UN3211	III	5.1	T8	152	203	241	2.5 L	30 L	B			56,58, 69,106
Perchlorates, inorganic, n.o.s.	5.1	UN1481	II	5.1		152	212	242	5 kg	25 kg	A			46, 56
Perchlorates, inorganic, n.o.s.	5.1	UN1481	III	5.1		152	213	240	25 kg	100 kg	A			46, 56
Perchloric acid *with more than 50 percent but not more than 72 percent acid, by mass.*	5.1	UN1873	I	5.1, 8	A2,A3,N41,T9, T27	None	201	243	Forbidden	2.5 L	D			66
Perchloric acid *with not more than 50 percent acid by mass.*	8	UN1802	II	8, 5.1	N41,T9	None	202	243	Forbidden	30 L	C			66
Perchloric acid, with more than 72 percent acid by mass.	Forbidden													
Perchloroethylene, see Tetrachloroethylene.	.....													
Perchloromethyl mercaptan	6.1	UN1670	I	6.1	2,B9,B14,B32 ,B74,N34,T38, T43,T45	None	227	244	Forbidden	Forbidden	D			40
Perchloryl fluoride	2.3	UN3083		2.3, 5.1	2,B9,B12,B14	None	302	314, 315	Forbidden	Forbidden	D			40
Percussion caps, see Primers, cap type.	.....													
Perfluoro(ethyl vinyl ether)	2.1	UN3154		2.1		306	302, 304, 305	314, 315	Forbidden	150 kg	E			40

HazMat Table

Powder cake, wetted *or* Powder paste, wetted *with not less than 25 percent water, by mass.*	1.3C	UN0159	II	1.3C.			None	62	None	Forbidden	Forbidden	B	1E,5E
Powder cake, wetted *or* Powder paste, wetted *with not less than 17 percent alcohol by mass.*	1.1C	UN0433	II	1.1C.			None	62	None	Forbidden	Forbidden	B	1E,5E
Powder paste, *see* Powder cake, *etc.*														
Powder, smokeless	1.1C	UN0160	II	1.1C.			None	62	None	Forbidden	Forbidden	B	10E,2 6E
Powder, smokeless	1.3C	UN0161	II	1.3C.			None	62	None	Forbidden	Forbidden	B	10E,2 6E
Power device, explosive, see Cartridges, power device.														
Primers, cap type	1.4S	UN0044	II	None			None	62	None	25 kg	100 kg	A	2E,6E
Primers, cap type	1.1B	UN0377	II	1.1B.			None	62	None	Forbidden	Forbidden	B	2E,6E
Primers, cap type	1.4B	UN0378	II	1.4B.			None	62	None	Forbidden	75 kg	A	24E
Primers, small arms, see Primers, cap type.														
Primers, tubular	1.3G	UN0319	II	1.3G.			None	62	None	Forbidden	Forbidden	B	24E
Primers, tubular	1.4G	UN0320	II	1.4G.			None	62	None	Forbidden	75 kg	A	
Primers, tubular	1.4S	UN0376	II	None			None	62	None	25 kg	100 kg	A	
Printing ink, *flammable*	3	UN1210	III	3	B1,T7,T30		150	173	242	60 L	220 L	A	
Printing ink, *flammable*	3	UN1210	I	3	T8,T31		150	173	243	1 L	30 L	E	
Printing ink, *flammable*	3	UN1210	II	3	T7,T30		150	173	242	5 L	60 L	B	
Projectiles, *inert with tracer*	1.4S	UN0345	II	1.4S				62	None	25 kg	100 kg	A	3E,7E, 9E
Projectiles, *inert, with tracer*	1.3G	UN0424	II	1.3G				62	None	Forbidden	Forbidden	B	3E,7E
Projectiles, *inert, with tracer*	1.4G	UN0425	II	1.4G				62	None	Forbidden	75 kg	A	3E,7E, 24E
Projectiles, *with burster or expelling charge.*	1.4G	UN0435	II	1.4G.				62	None	Forbidden	75 kg	A	3E,7E, 24E
Projectiles, *with burster or expelling charge.*	1.2D	UN0346	II	1.2D.				62	None	Forbidden	Forbidden	B	3E,7E
Projectiles, *with burster or expelling charge.*	1.4D	UN0347	II	1.4D.				62	None	Forbidden	75 kg	A	3E,7E, 24E

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Projectiles, with burster or expelling charge.	1.2F	UN0426	II	1.2F			62	None	Forbidden	Forbidden	E	
	Projectiles, with burster or expelling charge.	1.4F	UN0427	II	1.4F			62	None	Forbidden	Forbidden	E	
	Projectiles, with burster or expelling charge.	1.2G	UN0434	II	1.2G			62	None	Forbidden	Forbidden	B	3E,7E
	Projectiles, with bursting charge.	1.4D	UN0344	II	1.4D			62	None	Forbidden	75 kg	A	3E,7E, 24E
	Projectiles, with bursting charge.	1.2D	UN0169	II	1.2D			62	None	Forbidden	Forbidden	B	3E,7E
	Projectiles, with bursting charge.	1.2F	UN0324	II	1.2F			62	None	Forbidden	Forbidden	E	
	Projectiles, with bursting charge.	1.1D	UN0168	II	1.1D			62	None	Forbidden	Forbidden	B	3E,7E
	Projectiles, with bursting charge.	1.1F	UN0167	II	1.1F			62	None	Forbidden	Forbidden	E	
	Projectiles, illuminating, see Ammunition, illuminating, *etc.*												
	Propadiene mixed with methyl acetylene, see Methyl acetylene and propadiene mixtures, stabilized.												
	Propadiene, inhibited	2.1	UN2200		2.1		None	304	314, 315	Forbidden	150 kg	B	40
	Propane *see also* Petroleum gases, liquefied.	2.1	UN1978		2.1	19	306	304	314, 315	Forbidden	150 kg	E	40
	Propanethiols	3	UN2402	II	3	T8	150	202	242	5 L	60 L	E	95, 102
	n-Propanol *or* Propyl alcohol, normal.	3	UN1274	II	3	B1,T1	150	202	242	5 L	60 L	B	
	n-Propanol *or* Propyl alcohol, normal.	3	UN1274	III	3	B1,T1	150	203	242	60 L	220 L	A	
D	Propargyl alcohol	3	NA1986	II	3, 6.1		None	202	243	Forbidden	1 L	B	40
	Propellant, liquid	1.3C	UN0495	II	1.3C	37,125,126	None	62	None	Forbidden	Forbidden	B	

Propellant, liquid	1.1C	UN0497	II	1.1C	37,125,126	None	62	None	Forbidden	Forbidden	B				
Propellant, solid	1.1C	UN0498	II	1.1C		None	62	None	Forbidden	Forbidden	A				
Propellant, solid	1.3C	UN0499	II	1.3C		None	62	None	Forbidden	Forbidden	A				
Propionaldehyde	3	UN1275	II	3	T14	150	202	242	5 L	60 L	E				
Propionic acid	8	UN1848	III	8	T7	154	203	241	5 L	60 L	A				
Propionic anhydride	8	UN2496	III	8	T2	154	203	241	5 L	60 L	A				40
Propionitrile	3	UN2404	II	3, 6.1	T14	None	202	243	Forbidden	60 L	E				
Propionyl chloride	3	UN1815	II	3, 8	B100,T8,T26	None	202	243	1 L	5 L	B				40
n-Propyl acetate	3	UN1276	II	3	T1	150	202	242	5 L	60 L	B				
Propyl alcohol, *see* Propanol															
n-Propyl benzene	3	UN2364	III	3	B1,T1	150	203	242	60 L	220 L	A				
Propyl chloride	3	UN1278	II	3	N34,T14	None	202	242	Forbidden	60 L	E				
n-Propyl chloroformate	6.1	UN2740	I	6.1, 3, 8	2,A3,A6,A7,B9, B14,B32,B74, B77,N34,T38, T43,T45	None	227	244	Forbidden	2.5 L	B				21, 40, 100
Propyl formates	3	UN1281	II	3	T8	150	202	242	5 L	60 L	B				
n-Propyl isocyanate	6.1	UN2482	I	6.1, 3	1,B9,B14,B30, B72,T38,T43, T44	None	226	244	Forbidden	Forbidden	D				40
Propyl mercaptan, see Propanethiols															
n-Propyl nitrate	3	UN1865	II	3	T25	150	202	None	5 L	60 L	D				
Propylamine	3	UN1277	II	3, 8	N34,T14	None	202	243	1 L	5 L	E				40
Propylene *see also* Petroleum gases, liquefied	2.1	UN1077		2.1	19	306	304	314, 315	Forbidden	150 kg	E				40
Propylene chlorohydrin	6.1	UN2611	II	6.1, 3	T9	None	202	243	5 L	60 L	A				12, 40, 48
Propylene oxide	3	UN1280	I	3	A3,N34,T20,T29	None	201	243	1 L	30 L	E				40
Propylene tetramer	3	UN2850	III	3	B1,T1	150	203	242	60 L	220 L	A				
1,2-Propylenediamine	8	UN2258	II	8, 3	A3,A6,N34,T8	None	202	243	1 L	30 L	A				40
Propyleneimine, inhibited	3	UN1921	I	3	A3,N34,T25	None	201	243	1 L	30 L	B				40
Propyltrichlorosilane	8	UN1816	II	8, 3	A7,B2,B6,N34, T8,T26	None	202	243	Forbidden	30 L	C				40
Prussic acid, see Hydrogen cyanide															

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class of division	Identification Numbers	PG	Label Codes	Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Rare gases and nitrogen mixtures, compressed.	2.2	UN1981		2.2		306	302	None	75 kg	150 kg	A	
	Rare gases and oxygen mixtures, compressed.	2.2	UN1980		2.2		306	302	None	75 kg	150 kg	A	
	Rare gases, mixtures, compressed.	2.2	UN1979		2.2		306	302	None	75 kg	150 kg	A	
	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	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	RDX and Octogen mixtures, wetted *or* desensitized *see* RDX and HMX mixtures, wetted *or* desensitized *etc.*	.....	.....		.....		.....	.....	.....	.....	.....		
	RDX, see Cyclotrimethylene trinitramine, etc.	.....	.....		.....		.....	.....	.....	.....	.....		
	Receptacles, small, containing gas (gas cartridges) *flammable, without release device, not refillable and not exceeding 1 L capacity.*	2.1	UN2037		2.1		306	304	None	1 kg	15 kg	B	40
	Receptacles, small, containing gas (gas cartridges) *non-flammable, without release device, not refillable and not exceeding 1 L capacity.*	2.2	UN2037		2.2		306	304	None	1 kg	15 kg	B	40
	Red phosphorus, see Phosphorus, amorphous.	.....	.....		.....		.....	.....	.....	.....	.....		

	Refrigerant gases, n.o.s.	2.2	UN1078		2.2		306	304	314, 315	75 kg	150 kg	A	
D	Refrigerant gases, n.o.s. *or* Dispersant gases, n.o.s.	2.1	NA1954		2.1		306	304	314, 315	Forbidden	150 kg	D	40
D	Refrigerating machine	3	NA1993	III	3		174	174	None	10 L	10 L	A	
D	Refrigerating machines, *containing flammable, non-poisonous, liquefied gas.*	2.1	NA1954		2.1		306	306	306	Forbidden	25 kg	C	40
	Refrigerating machines, *containing non-flammable, non-toxic, liquefied gas or ammonia solutions (UN 2672).*	2.2	UN2857		2.2		306, 307	306	306, 307	Forbidden	450 kg	A	
D	Regulated medical waste	6.2	UN3291	II	6.2	A13,A14	134	197	None	Forbidden	Forbidden	E	
	Release devices, explosive	1.4S	UN0173	II	1.4S		None	62	None	25 kg	100 kg	A	
	Resin solution, *flammable*	3	UN1866	I	3	B52,T8,T31	150	201	243	1 L	30 L	E	
	Resin solution, *flammable*	3	UN1866	II	3	B52,T7,T30	150	173	242	5 L	60 L	B	
	Resin solution, *flammable*	3	UN1866	III	3	B1,B52,T7,T30	150	173	242	60 L	220 L	A	
	Resorcinol	6.1	UN2876	III	6.1		153	213	240	100 kg	200 kg	A	
	Rifle grenade, see Grenades, *hand or rifle, etc.*												
	Rifle powder, see Powder, smokeless *(UN 0160).*												
	Rivets, explosive	1.4S	UN0174	II	1.4S		None	62	None	25 kg	100 kg	A	
	Road asphalt or tar liquid, see Tars, liquid, *etc.*												
	Rocket motors	1.3C	UN0186	II	1.3C	109	None	62	None	Forbidden	220 kg	B	
	Rocket motors	1.1C	UN0280	II	1.1C	109	None	62	None	Forbidden	Forbidden	B	
	Rocket motors	1.2C	UN0281	II	1.2C	109	None	62	None	Forbidden	Forbidden	B	
	Rocket motors with hypergolic liquids *with or without an expelling charge.*	1.3L	UN0250	II	1.3L	109	None	62	None	Forbidden	Forbidden	E	2E,8E,11E,17E
	Rocket motors with hypergolic liquids *with or without an expelling charge.*	1.2L	UN0322	II	1.2L	109	None	62	None	Forbidden	Forbidden	E	2E,8E,11E,17E
	Rocket motors, liquid fueled	1.2J	UN0395	II	1.2J	109	None	62	None	Forbidden	Forbidden	E	7E,16E,23E
	Rocket motors, liquid fueled	1.3J	UN0396	II	1.3J	109	None	62	None	Forbidden	Forbidden	E	7E,16E,23E

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	Identification Numbers (4)	PG (5)	Label Codes (6)	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	Non-bulk (8B)	Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	Other (10B)
	Rockets, *with bursting charge*	1.2F	UN0295	II	1.2F		None	62	None	Forbidden	Forbidden	E	
	Rockets, *with bursting charge*	1.1F	UN0180	II	1.1F		None	62	None	Forbidden	Forbidden	E	
	Rockets, *with bursting charge*	1.1E	UN0181	II	1.1E		None	62	None	Forbidden	Forbidden	B	
	Rockets, *with bursting charge*	1.2E	UN0182	II	1.2E		None	62	None	Forbidden	Forbidden	B	
	Rockets, *with expelling charge*	1.4C	UN0438	II	1.4C		None	62	None	Forbidden	75 kg	A	24E
	Rockets, *with expelling charge*	1.3C	UN0437	II	1.3C		None	62	None	Forbidden	Forbidden	B	
	Rockets, *with expelling charge*	1.2C	UN0436	II	1.2C		None	62	None	Forbidden	Forbidden	B	
	Rockets, *with inert head*	1.3C	UN0183	II	1.3C		None	62	None	Forbidden	Forbidden	B	
	Rockets, line-throwing	1.3G	UN0240	II	1.3G		None	62	None	Forbidden	75 kg	B	24E
	Rockets, line-throwing	1.4G	UN0453	II	1.4G		None	62	None	Forbidden	75 kg	A	
	Rockets, line-throwing	1.2G	UN0238	II	1.2G		None	62	None	Forbidden	Forbidden	B	
	Rockets, liquid fueled *with bursting charge*	1.1J	UN0397	II	1.1J		None	62	None	Forbidden	Forbidden	E	7E,16 E,23E
	Rockets, liquid fueled *with bursting charge*	1.2J	UN0398	II	1.2J		None	62	None	Forbidden	Forbidden	E	7E,16 E,23E
	Rosin oil	3	UN1286	II	3	T7	150	202	242	5 L	60 L	B	
	Rosin oil	3	UN1286	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Rubber solution	3	UN1287	II	3	T7,T30	150	202	242	5 L	60 L	B	
	Rubber solution	3	UN1287	III	3	B1,T7,T30	150	203	242	60 L	220 L	A	
	Rubidium	4.3	UN1423	I	4.3	22,A7,A19, B100,N34,N40, N45	None	211	242	Forbidden	15 kg	D	
	Rubidium hydroxide	8	UN2678	II	8	T8	154	212	240	15 kg	50 kg	A	
	Rubidium hydroxide solution	8	UN2677	II	8	B2,T8	154	202	242	1 L	30 L	A	
	Rubidium hydroxide solution	8	UN2677	III	8	T7	154	203	241	5 L	60 L	A	
	Safety fuse, see Fuse, safety												
	Samples, explosive, *other than initiating explosives.*		UN0190	II		113	None	62	None	Forbidden	Forbidden	E	12E

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Shaped charges, commercial, see Charges, shaped, commercial *etc.*	.....	.....	.....	.....		.....	.....	.....	.....	.....		
	Signal devices, hand	1.4G	UN0191	II	1.4G.		None	62	None.	Forbidden	75 kg	A	24E
	Signal devices, hand	1.4S	UN0373	II	1.4S.		None	62	None.	25 kg	100 kg	A	
	Signals, distress, *ship*	1.3G	UN0195	II	1.3G.		None	62	None.	Forbidden	75 kg	B	
	Signals, distress, *ship*	1.1G	UN0194	II	1.1G.		None	62	None.	Forbidden	Forbidden	B	
	Signals, highway, see Signal devices, hand; Fireworks, type D.	.....	.....	.....	.....		.....	.....	.....	.....	.....		
	Signals, railway track, explosive	1.1G	UN0192	II	1.1G.		None	62	None.	Forbidden	Forbidden	B	24E
	Signals, railway track, explosive	1.4G	UN0493	II	1.4G.		None	62	None.	Forbidden	75 kg	A	
	Signals, railway track, explosive	1.4S	UN0193	II	1.4S.		None	62	None.	25 kg	100 kg	A	
	Signals, railway track, explosive	1.3G	UN0492	II	1.3G.		None	62	None.	Forbidden	Forbidden	E	1E,8E
	Signals, ship distress, water-activated, see Contrivances, water-activated, *etc.*	.....	.....	.....	.....		.....	.....	.....	.....	.....		
	Signals, smoke	1.1G	UN0196	II	1.1G.		None	62	None.	Forbidden	Forbidden	B	24E
	Signals, smoke	1.4G	UN0197	II	1.4G.		None	62	None.	Forbidden	75 kg	A	
	Signals, smoke	1.2G	UN0313	II	1.2G.		None	62	None.	Forbidden	Forbidden	B	
	Signals, smoke	1.3G	UN0487	II	1.3G.		None	62	None.	Forbidden	Forbidden	B	40, 57, 104
	Silane, compressed	2.1	UN2203		2.1		None	302	None.	Forbidden	Forbidden	E	
	Silicofluoric acid, see Fluorosilicic acid.	.....	.....	.....	.....		.....	.....	.....	.....	.....		
	Silicon chloride, see Silicon tetrachloride.	.....	.....	.....	.....		.....	.....	.....	.....	.....		
	Silicon powder, amorphous	4.1	UN1346	III	4.1	A1	None	213	240	25 kg	100 kg	A	40
	Silicon tetrachloride	8	UN1818	II	8	A3,A6,B2,B6, T18,T26,T29	154	202	242	1 L	30 L	C	

Sodium chloroacetate	6.1	UN2659	III	6.1		153	213	240	100 kg	200 kg	A				26
Sodium cuprocyanide, solid	6.1	UN2316	I	6.1		None	211	242	5 kg	50 kg	A				
Sodium cuprocyanide, solution	6.1	UN2317	I	6.1	T8,T26	None	201	243	1 L	30 L	B				26, 40
Sodium cyanide	6.1	UN1689	I	6.1	B69,B77,N74, N75,T42	None	211	242	5 kg	50 kg	B				52
Sodium dichloroisocyanurate or Sodium dichloro-s-triazinetrione, see Dichloroisocyanuric acid *etc.*															
Sodium dinitro-o-cresolate, *dry or wetted with less than 15 percent water, by mass.*	1.3C	UN0234	II	1.3C		None	62	None	Forbidden	Forbidden	B				1E,5E
Sodium dinitro-o-cresolate, wetted *with not less than 15 percent water, by mass.*	4.1	UN1348	I	4.1, 6.1	23,A8,A19,A20, N41	None	211	None	1 kg	15 kg	E				28, 36
Sodium dithionite *or* Sodium hydrosulfite.	4.2	UN1384	II	4.2	A19,A20,B106	None	212	241	15 kg	50 kg	E				13
Sodium fluoride	6.1	UN1690	III	6.1	T8	153	213	240	100 kg	200 kg	A				26
Sodium fluoroacetate	6.1	UN2629	I	6.1		None	211	242	5 kg	50 kg	E				
Sodium fluorosilicate	6.1	UN2674	III	6.1		153	213	240	100 kg	200 kg	A				26
Sodium hydrate, see Sodium hydroxide, solid.															
Sodium hydride	4.3	UN1427	I	4.3	A19,B100,N40	None	211	242	Forbidden	15 kg	E				
Sodium hydrogendifluoride *solution*	8	UN2439	II	8	N3,N34	154	202	242	1 L	30 L	A				12, 25, 26, 40
Sodium hydrogendifluoride, solid	8	UN2439	II	8	B106,N3,N34	154	212	240	15 kg	50 kg	A				12, 25, 26, 40
Sodium hydrosulfide *with not less than 25 percent water of crystallization.*	8	UN2949	II	8	A7	154	212	240	15 kg	50 kg	A				26
Sodium hydrosulfide, *with less than 25 percent water of crystallization.*	4.2	UN2318	II	4.2	A7,A19,A20	None	212	241	15 kg	50 kg	A				
D Sodium hydrosulfide, solution	8	NA2922	II	8, 6.1	B2	154	202	243	1 L	30 L	B				40, 95
Sodium hydrosulfite, *see* Sodium dithionite.															
Sodium hydroxide solution	8	UN1824	II	8	B2,N34,T8	154	202	242	1 L	30 L	A				
Sodium hydroxide solution	8	UN1824	III	8	N34,T7	154	203	241	5 L	60 L	A				
Sodium hydroxide, solid	8	UN1823	II	8		154	212	240	15 kg	50 kg	A				

HazMat Table

Sodium picramate, *dry or wetted with less than 20 percent water, by mass.*	1.3C	UN0235	II	1.3C.		None	62	None	Forbidden	Forbidden	B	1E,5E
Sodium picramate, wetted *with not less than 20 percent water, by mass.*	4.1	UN1349	II	4.1	23,A8,A19,N41	None	211	None	Forbidden	15 kg	E	28, 36
Sodium picryl peroxide	Forbidden											
Sodium potassium alloys, see Potassium sodium alloys.												
Sodium selenate, see Selenates *or* Selenites.												
D Sodium selenite	6.1	NA2630	II	6.1		None	212	242	25 kg	100 kg	E	
Sodium sulfide, anhydrous *or* Sodium sulfide *with less than 30 percent water of crystallization.*	4.2	UN1385	II	4.2	A19,A20,B106, N34	None	212	241	15 kg	50 kg	A	
Sodium sulfide, hydrated *with not less than 30 percent water.*	8	UN1849	II	8	T8	154	212	240	15 kg	50 kg	A	26
Sodium superoxide	5.1	UN2547	I	5.1	A20,N34	None	211	None	Forbidden	15 kg	E	13, 75, 106
Sodium tetranitride	Forbidden											
Solids containing corrosive liquid, n.o.s.	8	UN3244	II	8	49	154	212	240	15 kg	50 kg	B	40
Solids containing flammable liquid, n.o.s.	4.1	UN3175	II	4.1	47	151	212	240	15 kg	50 kg	B	
Solids containing toxic liquid, n.o.s.	6.1	UN3243	II	6.1	48	None	212	240	25 kg	100 kg	B	40
Sounding devices, explosive	1.2D	UN0375	II	1.2D		None	62	None	Forbidden	Forbidden	B	
Sounding devices, explosive	1.2F	UN0204	II	1.2F		None	62	None	Forbidden	Forbidden	E	
Sounding devices, explosive	1.1F	UN0296	II	1.1F		None	62	None	Forbidden	Forbidden	E	
Sounding devices, explosive	1.1D	UN0374	II	1.1D		None	62	None	Forbidden	Forbidden	B	
Spirits of salt, see Hydrochloric acid												
Squibs, see Igniters *etc.*												
Stannic chloride, anhydrous	8	UN1827	II	8	B2,T8,T26	154	202	242	1 L	30 L	C	
Stannic chloride, pentahydrate	8	UN2440	III	8		154	213	240	25 kg	100 kg	A	
Stannic phosphide	4.3	UN1433	I	4.3, 6.1	A19,B100,N40	None	211	242	Forbidden	15 kg	E	40, 85
Steel swarf, see Ferrous metal borings, *etc.*												

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage	
							(8A) Exceptions	(8B) Non-bulk	(8C) Bulk	(9A) Passenger aircraft/rail	(9B) Cargo aircraft only	(10A) Location	(10B) Other
	Stibine	2.3	UN2676		2.3, 2.1	1	None	304	None	Forbidden	Forbidden	D	40
	Storage batteries, wet, see Batteries, *wet etc.*												
	Strontium arsenite	6.1	UN1691	II	6.1		None	212	242	25 kg	100 kg	A	
	Strontium chlorate	5.1	UN1506	II	5.1	A1,A9,N34	152	212	242	5 kg	25 kg	A	56, 58, 106
	Strontium nitrate	5.1	UN1507	III	5.1	A1,A29	152	213	240	25 kg	100 kg	A	
	Strontium perchlorate	5.1	UN1508	II	5.1		152	212	242	5 kg	25 kg	A	56, 58, 106
	Strontium peroxide	5.1	UN1509	II	5.1		152	212	242	5 kg	25 kg	A	13, 75, 106
	Strontium phosphide	4.3	UN2013	I	4.3, 6.1	A19,N40	None	211	None	Forbidden	15 kg	E	40, 85
	Strychnine *or* Strychnine salts	6.1	UN1692	I	6.1		None	211	242	5 kg	50 kg	A	40
	Styphnic acid, *see* Trinitroresorcinol, *etc.*												
	Styrene monomer, inhibited	3	UN2055	III	3	B1,T1	150	203	242	60 L	220 L	A	
	Substances, explosive, n.o.s.	1.4C	UN0479	II	1.4C	101	None	62	None	Forbidden	75 kg	A	1E,5E
	Substances, explosive, n.o.s.	1.4G	UN0485	II	1.4G	101	None	62	None	Forbidden	75 kg	E	1E,8E
	Substances, explosive, n.o.s.	1.4D	UN0480	II	1.4D	101	None	62	None	Forbidden	75 kg	A	1E,5E, 24E
	Substances, explosive, n.o.s.	1.3G	UN0478	II	1.3G	101	None	62	None	Forbidden	Forbidden	E	1E,8E
	Substances, explosive, n.o.s.	1.3C	UN0477	II	1.3C	101	None	62	None	Forbidden	Forbidden	B	1E,5E
	Substances, explosive, n.o.s.	1.1D	UN0475	II	1.1D	101	None	62	None	Forbidden	Forbidden	B	1E,5E
	Substances, explosive, n.o.s.	1.1C	UN0474	II	1.1C	101	None	62	None	Forbidden	Forbidden	B	1E,5E
	Substances, explosive, n.o.s.	1.1L	UN0357	II	1.1L	101	None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E

Substances, explosive, n.o.s.	1.1A	UN0473	II	1.1A	101, 111	None	62	None	Forbidden	Forbidden	E	2E,6E
Substances, explosive, n.o.s.	1.3L	UN0359	II	1.3L	101	None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E
Substances, explosive, n.o.s.	1.2L	UN0358	II	1.2L	101	None	62	None	Forbidden	Forbidden	E	2E,8E, 11E,1 7E
Substances, explosive, n.o.s.	1.1G	UN0476	II	1.1G	101	None	62	None	Forbidden 25 kg	Forbidden 75 kg	E A	1E,8E
Substances, explosive, n.o.s.	1.4S	UN0481	II	1.4S	101	None	62	None				
Substances, explosive, very insensitive, n.o.s., *or* Substances, EVI, n.o.s.	1.5D	UN0482	II	1.5D	101	None	62	None	Forbidden	Forbidden	B	1E,5E
Substituted nitrophenol pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*	3	UN2780	I	3, 6.1		None	201	243	Forbidden	30 L	B	40
Substituted nitrophenol pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*	3	UN2780	II	3, 6.1		None	202	243	1 L	60 L	B	40
Substituted nitrophenol pesticides, liquid, toxic.	6.1	UN3014	I	6.1	T42	None	201	243	1 L	30 L	B	40
Substituted nitrophenol pesticides, liquid, toxic.	6.1	UN3014	II	6.1	T14	None	202	243	5 L	60 L	B	40
Substituted nitrophenol pesticides, liquid, toxic.	6.1	UN3014	III	6.1	T14	153	203	241	60 L	220 L	A	40
Substituted nitrophenol pesticides, liquid, toxic, flammable *flashpoint not less than 23 degrees C.*	6.1	UN3013	I	6.1, 3	T42	None	201	243	1 L	30 L	B	40
Substituted nitrophenol pesticides, liquid, toxic, flammable *flashpoint not less than 23 degrees C.*	6.1	UN3013	II	6.1, 3	T14	None	202	243	5 L	60 L	B	40
Substituted nitrophenol pesticides, liquid, toxic, flammable *flashpoint not less than 23 degrees C.*	6.1	UN3013	III	6.1, 3	B1,T14	153	203	242	60 L	220 L	A	40
Substituted nitrophenol pesticides, solid, toxic.	6.1	UN2779	I	6.1		None	211	242	5 kg	50 kg	A	40
Substituted nitrophenol pesticides, solid, toxic.	6.1	UN2779	II	6.1		None	212	242	25 kg	100 kg	A	40
Substituted nitrophenol pesticides, solid, toxic.	6.1	UN2779	III	6.1		153	213	240	100 kg	200 kg	A	40

HazMat Table

1,1,1,2-Tetrafluoroethane *or* Refrigerant gas R 134a.	2.2	UN3159	2.2		306	304	314, 315	75 kg	150 kg	A				
Tetrafluoroethylene, Inhibited	2.1	UN1081	2.1		306	304	None	Forbidden	150 kg	E	40			
Tetrafluoromethane, compressed *or* Refrigerant gas R 14.	2.2	UN1982	2.2		None	302	None	75 kg	150 kg	A				
1,2,3,6-Tetrahydrobenzaldehyde	3	UN2498	III	3	B1,T1	150	203	242	60 L	220 L	A			
Tetrahydrofuran	3	UN2056	II	3	T8	None	202	242	5 L	60 L	B			
Tetrahydrofurfurylamine	3	UN2943	III	3	B1,T1	150	203	242	60 L	220 L	A			
Tetrahydrophthalic anhydrides *with more than 0.05 percent of maleic anhydride.*	8	UN2698	III	8		154	213	240	25 kg	100 kg	A			
1,2,3,6-Tetrahydropyridine	3	UN2410	II	3	T8	150	202	242	5 L	60 L	B			
Tetrahydrothiophene	3	UN2412	II	3	T7	150	202	242	5 L	60 L	B			
Tetramethylammonium hydroxide	8	UN1835	II	8	B2,T8	154	202	242	1 L	30 L	A			
Tetramethylene diperoxide dicarbamide.	Forbidden													
Tetramethylsilane	3	UN2749	I	3	T21,T26	None	201	243	Forbidden	30 L	D			
Tetranitro diglycerin	Forbidden													
Tetranitroaniline	1.1D	UN0207	II	1.1D		None	62	None	Forbidden	Forbidden	B		1E,5E	
+ Tetranitromethane	5.1	UN1510	I	5.1, 6.1	2,B9,B14,B32, B74,T38,T43, T45	None	227	None	Forbidden	Forbidden	D		40, 66, 106	
2,3,4,6-Tetranitrophenol	Forbidden													
2,3,4,6-Tetranitrophenyl methyl nitramine.	Forbidden													
2,3,4,6-Tetranitrophenylnitramine	Forbidden													
Tetranitroresorcinol (dry)	Forbidden													
2,3,5,6-Tetranitroso nitrobenzene (dry).	Forbidden													
2,3,5,6-Tetranitroso-1,4-dinitrobenzene.	Forbidden													
Tetrapropylorthotitanate	3	UN2413	III	3	B1,T8	150	203	242	60 L	220 L	A			
Tetrazene, *see* Guanyl nitrosaminoguanyltetrazene.														
Tetrazine (dry)	Forbidden													
Tetrazol-1-acetic acid	1.4C	UN0407	II	1.4C		None	62	None	Forbidden	75 kg	A		1E,5E, 24E	

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	(4) Identification Numbers	(5) PG	(6) Label Codes	(7) Special provisions	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Toluene sulfonic acid, see Alkyl, *or* Aryl sulfonic acid *etc.*	.....	.....	.....	.....		.....	.....	.....	.....	.....		
	Toluidines *liquid*	6.1	UN1708	II	6.1	T14	None	202	243	5 L	60 L	A	
	Toluidines *solid*	6.1	UN1708	II	6.1		None	212	242	25 kg	100 kg	A	
	2,4-Toluylenediamine *or* 2,4-Toluenediamine.	6.1	UN1709	III	6.1	T7	153	213	240	100 kg	200 kg	A	
	Torpedoes *with bursting charge*	1.1F	UN0330	II	1.1F			62	None	Forbidden	Forbidden	B	
	Torpedoes *with bursting charge*	1.1D	UN0451	II	1.1D			62	None	Forbidden	Forbidden	B	
	Torpedoes *with bursting charge*	1.1E	UN0329	II	1.1E			62	None	Forbidden	Forbidden	B	7E,16 E,23E
	Torpedoes, liquid fueled, *with inert head.*	1.3J	UN0450	II	1.3J			62	None	Forbidden	Forbidden	E	7E,16 E,23E
	Torpedoes, liquid fueled, *with or without bursting charge.*	1.1J	UN0449	II	1.1J			62	None	Forbidden	Forbidden	E	
	Toxic liquid, corrosive, inorganic, n.o.s.	6.1	UN3289	I	6.1, 8	T42	None	201	243	0.5 L	2.5 L	A	
	Toxic liquid, corrosive, inorganic, n.o.s.	6.1	UN3289	II	6.1, 8	T14	None	202	243	1 L	30 L	A	
	Toxic liquid, corrosive, inorganic, n.o.s. *Inhalation Hazard, Packing Group I, Zone A.*	6.1	UN3289	I	6.1, 8	1,B9,B14,B30, B72,T38,T43, T44	None	226	244	Forbidden	Forbidden	B	40
	Toxic liquid, corrosive, inorganic, n.o.s. *Inhalation Hazard, Packing Group I, Zone B.*	6.1	UN3289	I	6.1, 8	2,B9,B14,B32, B74,T38,T43, T45	None	227	244	Forbidden	Forbidden	B	40
	Toxic liquid, inorganic, n.o.s.	6.1	UN3287	I	6.1	T42	None	201	243	1 L	30 L	A	
	Toxic liquid, inorganic, n.o.s.	6.1	UN3287	II	6.1	B110,T14	None	202	243	5 L	60 L	A	
	Toxic liquid, inorganic, n.o.s.	6.1	UN3287	III	6.1	T7	153	203	241	60 L	220 L	A	
	Toxic liquid, inorganic, n.o.s. *Inhalation Hazard, Packing Group I, Zone A.*	6.1	UN3287	I	6.1	1,B9,B14,B30, B72,T38,T43, T44	None	226	244	Forbidden	Forbidden	B	40

Toxic solids, self-heating, n.o.s.	6.1	UN3124	II	6.1, 4.2		None	212	242	15 kg	50 kg	D	40
Toxic solids, water-reactive, n.o.s.	6.1	UN3125	I	6.1, 4.3	A5,B100	None	211	242	5 kg	15 kg	D	40
Toxic solids, water-reactive, n.o.s.	6.1	UN3125	II	6.1, 4.3	B101	None	212	242	15 kg	50 kg	D	40
Toxic, liquids, organic, n.o.s.	6.1	UN2810	I	6.1	T42	None	201	243	1 L	30 L	B	40
Toxic, liquids, organic, n.o.s.	6.1	UN2810	II	6.1	B110,T14	None	202	243	5 L	60 L	B	40
Toxic, liquids, organic, n.o.s.	6.1	UN2810	III	6.1	T7	153	203	241	60 L	220 L	A	40
Toxic, liquids, organic, n.o.s. *Inhalation hazard, Packing Group I, Zone A.*	6.1	UN2810	I	6.1	1,B9,B14,B30, B72,T38,T43, T44	None	226	244	Forbidden	Forbidden	D	20, 40, 95
Toxic, liquids, organic, n.o.s. *Inhalation hazard, Packing Group I, Zone B.*	6.1	UN2810	I	6.1	2,B9,B14,B32, B74,T38,T43, T45	None	227	244	Forbidden	Forbidden	D	20, 40, 95
D Toy Caps	1.4S	NA0337	II	1.4S		None	62	None	25 kg	100 kg	A	9E
Tracers for ammunition	1.4G	UN0306	II	1.4G		None	62	None	Forbidden	75 kg	A	24E
Tracers for ammunition	1.3G	UN0212	II	1.3G		None	62	None	Forbidden	Forbidden	B	
Tractors, see Vehicles, self-propelled.												
Tri-(b-nitroxyethyl) ammonium nitrate.	Forbidden											
Triallyl borate	6.1	UN2609	III	6.1		153	203	241	60 L	220 L	A	13
Triallylamine	3	UN2610	III	3, 8	B1,T1	None	203	242	5 L	60 L	A	40
Triazine pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*	3	UN2764	I	3, 6.1		None	201	243	Forbidden	30 L	B	40
Triazine pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*	3	UN2764	II	3, 6.1		None	202	243	1 L	60 L	B	40
Triazine pesticides, liquid, toxic	6.1	UN2998	I	6.1	T42	None	201	243	1 L	30 L	B	40
Triazine pesticides, liquid, toxic	6.1	UN2998	II	6.1	T14	None	202	243	5 L	60 L	B	40
Triazine pesticides, liquid, toxic	6.1	UN2998	III	6.1	T14	153	203	241	60 L	220 L	A	40
Triazine pesticides, liquid, toxic, flammable, *flashpoint not less than 23 degrees C.*	6.1	UN2997	I	6.1, 3	T42	None	201	243	1 L	30 L	B	40

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Trimethylacetyl chloride	6.1	UN2438	I	6.1, 8, 3	2,B3,B9,B14, B32,B74,N34, T38,T43,T45	None	227	244	Forbidden	Forbidden	D	25, 40
	Trimethylamine, anhydrous	2.1	UN1083		2.1		306	304	314, 315	Forbidden	150 kg	B	40
	Trimethylamine, aqueous solutions *with not more than 50 percent trimethylamine by mass.*	3	UN1297	I	3, 8	T42	None	201	243	0.5 L	2.5 L	D	40, 41
	Trimethylamine, aqueous solutions *with not more than 50 percent trimethylamine by mass.*	3	UN1297	II	3, 8	B1,T14	None	202	243	1 L	5 L	B	40, 41
	Trimethylamine, aqueous solutions *with not more than 50 percent trimethylamine by mass.*	3	UN1297	III	3, 8	B1	150	203	242	5 L	60 L	A	40, 41
	1,3,5-Trimethylbenzene	3	UN2325	III	3	B1,T1	None	203	242	60 L	220 L	A	
	Trimethylchlorosilane	3	UN1298	II	3, 8	A3,A7,B77,N34, T14,T26	None	202	243	1 L	5 L	E	40
	Trimethylcyclohexylamine	8	UN2326	III	8	T2	154	203	241	5 L	60 L	A	
	Trimethylene glycol diperchlorate	Forbidden											
	Trimethylhexamethylene diisocyanate	6.1	UN2328	III	6.1	T8	153	203	241	60 L	220 L	B	
	Trimethylhexamethylenediamines	8	UN2327	III	8	T7	154	203	241	5 L	60 L	A	
	Trimethylol nitromethane trinitrate	Forbidden											
	2,4,6-Trinitro-1,3,5-triazido benzene (dry).	Forbidden											
	2,4,6-Trinitro-1,3-diazobenzene	Forbidden											
	Trinitro-meta-cresol	1.1D	UN0216	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Trinitroacetic acid	Forbidden											
	Trinitroacetonitrile	Forbidden											

Trinitroamine cobalt	Forbidden			.....		.....	.....	.....	.....	.....				
Trinitroaniline *or* Picramide	1.1D	UN0153	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Trinitroanisole	1.1D	UN0213	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Trinitrobenzene, *dry or wetted with less than 30 percent water, by mass.*	1.1D	UN0214	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Trinitrobenzene, wetted *with not less than 30 percent water, by mass.*	4.1	UN1354	I	4.1	23,A2,A8,A19, N41	None	211	None	0.5 kg	0.5 kg	E			28
Trinitrobenzenesulfonic acid	1.1D	UN0386	II	1.1D		None	62	None	Forbidden	Forbidden	E			1E,5E
Trinitrobenzoic acid, *dry or wetted with less than 30 percent water, by mass.*	1.1D	UN0215	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Trinitrobenzoic acid, wetted *with not less than 30 percent water, by mass.*	4.1	UN1355	I	4.1	23,A2,A8,A19, N41	None	211	None	0.5 kg	0.5 kg	E			28
Trinitrochlorobenzene *or* Picryl chloride	1.1D	UN0155	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Trinitroethanol	Forbidden			.....		.....	.....	.....	.....	.....				
Trinitroethylnitrate	Forbidden			.....		.....	.....	.....	.....	.....				
Trinitrofluorenone	1.1D	UN0387	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Trinitromethane	Forbidden			.....		.....	.....	.....	.....	.....				
Trinitronaphthalene	1.1D	UN0217	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
1,3,5-Trinitronaphthalene	Forbidden			.....		.....	.....	.....	.....	.....				
Trinitrophenetole	1.1D	UN0218	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Trinitrophenol *or* Picric acid, *dry or wetted with less than 30 percent water, by mass.*	1.1D	UN0154	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E
Trinitrophenol, wetted *with not less than 30 percent water, by mass.*	4.1	UN1344	I	4.1	23,A8,A19,N41	None	211	None	1 kg	15 kg	E			28, 36
2,4,6-Trinitrophenyl guanidine (dry)	Forbidden			.....		.....	.....	.....	.....	.....				
2,4,6-Trinitrophenyl nitramine	Forbidden			.....		.....	.....	.....	.....	.....				
2,4,6-Trinitrophenyl trimethylol methyl nitramine trinitrate (dry)	Forbidden			.....		.....	.....	.....	.....	.....				
Trinitrophenylmethylnitramine *or* Tetryl	1.1D	UN0208	II	1.1D		None	62	None	Forbidden	Forbidden	B			1E,5E

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class of division	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Trinitroresorcinol *or* Styphnic acid, *dry or wetted with less than 20 percent water, or mixture of alcohol and water, by mass.*	1.1D	UN0219	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Trinitroresorcinol, wetted *or* Styphnic acid, wetted *with not less than 20 percent water, or mixture of alcohol and water by mass.*	1.1D	UN0394	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	2,4,6-Trinitroso-3-methyl nitraminoanisole.	Forbidden											
	Trinitrotetramine cobalt nitrate	Forbidden											
	Trinitrotoluene *or* TNT, *dry or wetted with less than 30 percent water, by mass.*	1.1D	UN0209	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Trinitrotoluene and Trinitrobenzene mixtures *or* TNT and trinitrobenzene mixtures *or* TNT and hexanitrostilbene mixtures *or* Trinitrotoluene and hexanitrostilbene mixtures.	1.1D	UN0388	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Trinitrotoluene mixtures containing Trinitrobenzene and Hexanitrostilbene *or* TNT mixtures containing trinitrobenzene and hexanitrostilbene.	1.1D	UN0389	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E,5E
	Trinitrotoluene, wetted *with not less than 30 percent water, by mass.*	4.1	UN1356	II	4.1	23,A2,A8,A19, N41	None	211	None	0.5 kg	0.5 kg	E	28
	Tripropylamine	3	UN2260	III	3, 8	B1,T8	150	203	242	5 L	60 L	A	40
	Tripropylene	3	UN2057	II	3	T1	150	202	242	5 L	60 L	B	
	Tripropylene	3	UN2057	III	3	B1,T1	150	203	242	60 L	220 L	A	

	Forbidden													
Tris, bis-difluoroamino diethoxy propane (TVOPA).	Forbidden													
Tris-(1-aziridinyl)phosphine oxide, solution.	6.1	UN2501	II	6.1	T8		None	202	243	5 L	60 L	A		
Tris-(1-aziridinyl)phosphine oxide, solution.	6.1	UN2501	III	6.1	T7		153	203	241	60 L	220 L	A		
Tritonal	1.1D	UN0390	II	1.1D			None	62	None	Forbidden	Forbidden	B		1E,5E
Tungsten hexafluoride	2.3	UN2196		2.3, 8	2		None	338	None	Forbidden	Forbidden	D		40
Turpentine	3	UN1299	III	3	B1,T1		150	203	242	60 L	220 L	A		
Turpentine substitute	3	UN1300	I	3	T1		None	201	243	1 L	30 L	B		
Turpentine substitute	3	UN1300	II	3	T1		150	202	242	5 L	60 L	B		
Turpentine substitute	3	UN1300	III	3	B1,T1		150	203	242	60 L	220 L	A		
Undecane	3	UN2330	III	3	B1,T1		150	203	242	60 L	220 L	A		
Uranium hexafluoride, *fissile excepted or non-fissile.*	7	UN2978		7, 8			421-2	420, 425	420, 425					
Uranium hexafluoride, fissile (*with more than 1 percent U-235*).	7	UN2977		7, 8			453	417, 420	417, 420			A		
Uranium metal, pyrophoric	7	UN2979		7, 4.2			None	418	None			D		
Uranyl nitrate hexahydrate solution	7	UN2980		7, 8			421, 425	415, 416, 417	415, 416, 417			D		
Uranyl nitrate, solid	7	UN2981		7, 5.1			None	419	None	Forbidden	15 kg	A		
Urea hydrogen peroxide	5.1	UN1511	III	5.1, 8	A1,A7,A29		152	213	240	25 kg	100 kg	A		13
Urea nitrate, *dry or wetted with less than 20 percent water, by mass.*	1.1D	UN0220	II	1.1D	119		None	62	None	Forbidden	Forbidden	B		1E,5E
Urea nitrate, wetted *with not less than 20 percent water, by mass.*	4.1	UN1357	I	4.1	39,A8,A19,N41		None	211	None	1 kg	15 kg	A		28
Urea peroxide, see Urea hydrogen peroxide.														
Valeraldehyde	3	UN2058	II	3	T1		150	202	242	5 L	60 L	B		
Valeric acid, see Corrosive liquids, n.o.s.														
Valeryl chloride	8	UN2502	II	8, 3	A3,A6,A7,B2, N34,T8		154	202	243	1 L	30 L	C		40
Vanadium compound, n.o.s.	6.1	UN3285	I	6.1			None	211	242	5 kg	50 kg	B		
Vanadium compound, n.o.s.	6.1	UN3285	II	6.1	T14		None	212	242	25 kg	100 kg	B		
Vanadium compound, n.o.s.	6.1	UN3285	III	6.1	T7		153	213	240	100 kg	200 kg	A		

HazMat Table

Vinyl nitrate polymer	Forbidden					150	201	243	1 L		30 L	E	40
Vinylidene chloride, inhibited	3	UN1303	II	3	T23,T29	None	202	243	1 L		30 L	B	40
Vinylpyridines, inhibited	6.1	UN3073	II	6.1, 3, 8	B100,T8								
Vinyltoluene, inhibited	3	UN2618	III	3	B1,T1	150	203	242	60 L		220 L	A	
Vinyltrichlorosilane, inhibited	3	UN1305	I	3, 8	A3,A7,B6,N34, T14,T26	None	201	243	Forbidden		2.5 L	B	40
Warheads, rocket *with burster or expelling charge.*	1.4D	UN0370	II	1.4D		None	62	None	Forbidden		75 kg	A	3E,7E, 24E
Warheads, rocket *with burster or expelling charge.*	1.4F	UN0371	II	1.4F		None	62	None	Forbidden		Forbidden	E	
Warheads, rocket *with bursting charge.*	1.1D	UN0286	II	1.1D		None	62	None	Forbidden		Forbidden	B	3E,7E
Warheads, rocket *with bursting charge.*	1.2D	UN0287	II	1.2D		None	62	None	Forbidden		Forbidden	B	3E,7E
Warheads, rocket *with bursting charge.*	1.1F	UN0369	II	1.1F		None	62	None	Forbidden		Forbidden	E	
Warheads, torpedo *with bursting charge.*	1.1D	UN0221	II	1.1D		None	62	None	Forbidden		Forbidden	B	3E,7E
Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	I	4.3, 8		None	201	243	Forbidden		1 L	D	
Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	II	4.3, 8	B106	151	202	243	1 L		5 L	E	85
Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	III	4.3, 8	B106	151	203	242	5 L		60 L	E	
Water-reactive liquid, n.o.s.	4.3	UN3148	II	4.3	B106	None	202	243	1 L		5 L	E	40
Water-reactive liquid, n.o.s.	4.3	UN3148	III	4.3	B106	None	203	242	5 L		60 L	E	40
Water-reactive liquid, n.o.s.	4.3	UN3148	I	4.3		None	201	244	Forbidden		1 L	E	40
Water-reactive liquid, toxic, n.o.s.	4.3	UN3130	I	4.3, 6.1	A4	None	201	243	Forbidden		1 L	D	
Water-reactive liquid, toxic, n.o.s.	4.3	UN3130	II	4.3, 6.1	B106	None	202	243	1 L		5 L	E	85
Water-reactive liquid, toxic, n.o.s.	4.3	UN3130	III	4.3, 6.1	B106	None	203	242	5 L		60 L	E	85
Water-reactive solid, corrosive, n.o.s.	4.3	UN3131	I	4.3, 8	B101,B106,N40	None	211	242	Forbidden		15 kg	D	
Water-reactive solid, corrosive, n.o.s.	4.3	UN3131	II	4.3, 8	128,B101,B106	151	212	242	15 kg		50 kg	E	85

HazMat Table

§172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Symbols	Hazardous materials descriptions and proper shipping names (2)	Hazard class of division (3)	Identification Numbers (4)	PG (5)	Label Codes (6)	Special provisions (7)	(8) Packaging (§173.***) Exceptions (8A)	(8) Packaging (§173.***) Non-bulk (8B)	(8) Packaging (§173.***) Bulk (8C)	(9) Quantity limitations Passenger aircraft/rail (9A)	(9) Quantity limitations Cargo aircraft only (9B)	(10) Vessel stowage Location (10A)	(10) Vessel stowage Other (10B)
	Zinc nitrate	5.1	UN1514	II	5.1		152	212	240	5 kg	25 kg	A	
	Zinc permanganate	5.1	UN1515	II	5.1		152	212	242	5 kg	25 kg	D	56, 58, 69, 106, 107
	Zinc peroxide	5.1	UN1516	II	5.1		152	212	242	5 kg	25 kg	A	13, 75, 106
	Zinc phosphide	4.3	UN1714	I	4.3, 6.1	A19,N40	None	211	None	Forbidden	15 kg	E	40, 85
	Zinc powder *or* Zinc dust	4.3	UN1436	I	4.3, 4.2	A19,B109,N40	None	211	242	Forbidden	15 kg	A	
	Zinc powder *or* Zinc dust	4.3	UN1436	II	4.3, 4.2	A19,B109	None	212	242	15 kg	50 kg	A	
	Zinc powder *or* Zinc dust	4.3	UN1436	III	4.3, 4.2	B108	None	213	242	25 kg	100 kg	A	
	Zinc resinate	4.1	UN2714	III	4.1	A1	151	213	240	25 kg	100 kg	A	
	Zinc selenate, see Selenates *or* Selenites.												
	Zinc selenite, see Selenates *or* Selenites.												
	Zinc silicofluoride, see Zinc fluorosilicate.												
	Zirconium hydride	4.1	UN1437	II	4.1	A19,A20,N34	None	212	240	15 kg	50 kg	E	
	Zirconium nitrate	5.1	UN2728	III	5.1	A1,A29	152	213	240	25 kg	100 kg	A	
	Zirconium picramate, *dry or wetted with less than 20 percent water, by mass.*	1.3C	UN0236	II	1.3C		None	62	None	Forbidden	Forbidden	B	1E,5E
	Zirconium picramate, wetted *with not less than 20 percent water, by mass.*	4.1	UN1517	I	4.1	23,N41	None	211	None	1 kg	15 kg	D	28, 36

Zirconium powder, dry	4.2	UN2008	I	4.2		None	211	242	Forbidden	Forbidden	D		
Zirconium powder, dry	4.2	UN2008	II	4.2	A19,A20,N5,N34	None	212	241	15 kg	50 kg	D		
Zirconium powder, dry	4.2	UN2008	III	4.2		None	213	241	25 kg	100 kg	D		
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 840 microns.*	4.1	UN1358	II	4.1	A19,A20,N34	None	212	241	15 kg	50 kg	E		
Zirconium scrap	4.2	UN1932	III	4.2	N34	None	213	240	Forbidden	Forbidden	D		
Zirconium sulfate	8	NA9163	III	8	N34	None	213	240	50 kg	No limit	A		
Zirconium suspended in a liquid	3	UN1308	I	3		None	201	243	Forbidden	Forbidden	B		
Zirconium suspended in a liquid	3	UN1308	II	3		None	202	242	5 L	60 L	B		
Zirconium suspended in a liquid	3	UN1308	III	3	B1	150	203	242	60 L	220 L	B		
Zirconium tetrachloride	8	UN2503	III	8		154	213	240	25 kg	100 kg	A		
Zirconium, dry, *coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns).*	4.1	UN2858	III	4.1	A1	151	213	240	25 kg	100 kg	A		
Zirconium, dry, *finished sheets, strip or coiled wire.*	4.2	UN2009	III	4.2	A1,A19	None	213	240	25 kg	100 kg	D		

HazMat Table

APPENDIX B TO § 172.101 LIST OF MARINE POLLUTANTS—Continued

S.M.P.	Marine Pollutant
(1)	(2)
.....	4-Thiapentanal
.....	Thiocarbonyl tetrachloride
.....	Triaryl phosphates, isopropylated
PP	Triaryl phosphates, n.o.s.
.....	Triazophos
.....	Tribromomethane
PP	Tributyltin compounds
.....	Trichlorfon
.....	Trichlorobenzenes, liquid
.....	Trichlorobutene
.....	Trichlorobutylene
.....	Trichloromethane sulphuryl chloride
.....	Trichloromethyl sulphochloride
.....	Trichloronat
.....	Tricresyl phosphate (less than 1% ortho-isomer)
PP	Tricresyl phosphate (not less than 1% ortho-isomer)
PP	Tricresyl phosphate *with more than 3 per cent ortho isomer*
.....	Triethylbenzene
.....	Triisopropylated phenyl phosphates
.....	1,2,3-Trimethylbenzene
.....	1,2,4-Trimethylbenzene
.....	1,3,5-Trimethylbenzene
.....	Trimethylene dichloride
.....	Triphenylphosphate
PP	Triphenyltin compounds
.....	Tritolyl phosphate (less than 1% ortho-isomer)
PP	Tritolyl phosphate (not less than 1% ortho-isomer)
.....	Trixylenyl phosphate
.....	Turpentine
.....	1-Undecanol
.....	normal-Valeraldehyde
.....	Vinylbenzene, inhibited
.....	Vinylidene chloride, inhibited
.....	Vinyltoluenes, inhibited *mixed isomers*
.....	Warfarin (and salts of)
PP	White phosphorus, dry
PP	White phosphorus, molten
PP	White phosphorus, wet
.....	White spirit, low (15-20%) aromatic
.....	Xylenols
PP	Yellow phosphorus, dry
PP	Yellow phosphorus, molten

APPENDIX B TO § 172.101 LIST OF MARINE POLLUTANTS—Continued

S.M.P.	Marine Pollutant
(1)	(2)
PP	Yellow phosphorus, wet
.....	Zinc bromide
.....	Zinc cyanide

[Amdt. 172-119, 54 FR 39501, Sept. 26, 1989, Amdt. 172-126, 57 FR 45446, Oct. 1, 1992; Amdt. 172-127, 57 FR 52935, Nov. 5, 1992; Amdt. 172-123, 57 FR 59308, Dec. 15, 1992; Amdt. 172-125, FR 58 244, Jan. 5, 1993; Amdt. 172-128, FR 58 6864, Feb. 2, 1993; FR 58 33302, June 16, 1993; FR 59 31822, June 20, 1994; FR 59 49128, September 26, 1994; 60 FR 49106 September 21, 1995; 60 FR 40030, August 04, 1995; 60 FR 48780, Septermber 20, 1995; 60 FR 49048, September 21, 1995; 60 FR 49106, September 21, 1995; 60 FR 50292, September 28, 1995; 61 FR 50616, September 26, 1996; 61 FR 51238, October 01, 1996; 62 FR 1217, January 08, 1997; 62 FR 24701, May 6, 1997; 62 FR 30770, June 5, 1997]

§172.102 Special provisions.

(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.

(b) *Description of codes for special provisions.* Special provisions contain packaging provisions, prohibitions, exceptions from requirements for particular quantities or forms of materials and requirements or prohibitions applicable to specific modes of transportation, as follows:

(1) A code consisting only of numbers (for example, "11") is multi-modal in application

and may apply to bulk and non-bulk packagings.

(2) A code containing the letter "A" refers to a special provision which applies only to transportation by aircraft.

(3) A code containing the letter "B" refers to a special provision which applies only to bulk packaging requirements. Unless otherwise provided in this subchapter, these special provisions do not apply to IM portable tanks.

(4) A code containing the letter "H" refers to a special provision which applies only to transportation by highway.

(5) A code containing the letter "N" refers to a special provision which applies only to non-bulk packaging requirements.

(6) A code containing the letter "R" refers to a special provision which applies only to transportation by rail.

(7) A code containing the letter "T" refers to a special provision which applies only to transportation in IM portable tanks.

(8) A code containing the letter "W" refers to a special provision which applies only to transportation by water.

(c) *Tables of special provisions.* The following tables list, and set forth the requirements of, the special provisions referred to in Column 7 of the § 172.101 Table.

(1) *Numeric provisions.* These provisions are multi-modal and apply to bulk and non-bulk packagings:

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 Chemical kits and first aid kits are boxes, cases, etc., containing small amounts of various compatible dangerous goods which are used for medical, analytical, or testing purposes and for which exceptions are provided in this subchapter. For transportation by aircraft, any hazardous materials forbidden in passenger aircraft may not be in-

cluded in these kits. Inner packagings may not exceed 250 mL for liquids or 250 g for solids and must be protected from other materials in the kit. The total quantity of hazardous materials in any one kit may not exceed either 1 L or 1 kg. The packing group assigned to the kit as a whole must be the most stringent packing group assigned to any individual substance contained in the kit. Kits must be packed in wooden boxes (4C1, 4C2), plywood boxes (4D), reconstituted wood boxes (4F), fiberboard boxes (4G) or plastic boxes (4H1, 4H2); these packagings must meet the requirements appropriate to the packing group assigned to the kit as a whole. The total quantity of hazardous materials in any one package may not exceed either 10 L or 10 kg. Kits which 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.

17 Aqueous solutions of hydrogen peroxide containing less than 8 percent hydrogen peroxide are not subject to the requirements 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.

20 The transport of this substance, when in concentrations of greater than 10% nitroglycerin, is prohibited. Concentrations of below 5% nitroglycerin may be transported as a Class 3 material; see UN 1204 and UN 3064.

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.

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.

25 Until October 1, 1997, this material may be transported or offered for transportation in a packaging authorized under the regulations in effect on September 30, 1996.

26 This entry does not include ammonium permanganate, the transport of which is prohibited except when approved by the Associate Administrator for Hazardous Materials Safety.

27 Sodium carbonate peroxyhydrate is considered non-hazardous.

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 for Hazardous Materials Safety.

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 liters (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° C (5° 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° 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.

43 The nitrogen content of the nitrocellulose must not exceed 11.5 percent. Each single filter sheet must be packed between sheets of glazed paper. The portion of glazed paper between the filter sheets must not be less than 65 percent, by mass. The membrane filters/paper arrangement must not be liable to propagate a detonation as tested by one of the tests described in the UN Recommendations, Tests and Criteria, Part I, Test series 1 (a). Packagings should be so constructed that explosion is not possible by reason of increased internal pressure.

44 The formulation must be prepared so that it remains homogeneous 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, nor being a flammable solid when tested in accordance with Appendix E to Part 173 of this subchapter (chips, if necessary, crushed and sieved to a particle size of less than 1.25 mm) are not subject to 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 which 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. Each packaging must correspond to a design 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 onto 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 Ammonium nitrate fertilizers may not meet the definition and criteria of Class 1 (explosive) material (see § 173.50 of this subchapter).

53 Packages of these materials must bear the subsidiary risk label, "EXPLOSIVE", unless otherwise provided in this subchapter or through an approval issued by the Associate Administrator for Hazardous Materials Safety, or the competent authority of the country of 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 for Hazardous Materials Safety.

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^3 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.

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 for Hazardous Materials Safety. 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.

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 reclassed 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.

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.

104 Detonators which meet the following conditions may be assigned to 1.4S classification code: Each detonator may contain no more than 1 g of explosive, excluding ignition and delay charges, and if one detonator near the center of a package detonates it will not cause functioning of any other device in the same or adjacent packages.

105 The word "Agents" may be used instead of "Explosives" when approved by the Associate Administrator for Hazardous Materials Safety.

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 Cartridges containing 3.2 grams or less of deflagrating (propellant) explosives installed in a fire extinguisher are not subject to the requirements of this subchapter.

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 reclassed 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 US006 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 for Hazardous Materials Safety.

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.

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 for Hazardous Materials Safety.

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 and approved by the Associate Administrator for Hazardous Materials Safety. Testing must be conducted on at least three packages as prepared for transport. Mixtures containing at least 90%, by mass, of phlegmatizer are not subject to the requirements of this subchapter. Packages containing mixtures with not less than 98% 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 Notwithstanding the provisions of § 172.101(c)(12), an aluminum smelting by-product or aluminum remelting by-product described under this entry, in Packing Group II or III, may be packaged in accordance with Special Provision B115 of this section.

(2) *"A" codes.* These provisions apply only to transportation by aircraft:

Code / Special Provisions

A1 Single packagings are not permitted on passenger aircraft.

A2 Single packagings are not permitted on aircraft.

A3 For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings.

A4 Liquids having an inhalation toxicity of Packing Group I are not permitted on aircraft.

A5 Solids having an inhalation toxicity of Packing Group I are not permitted on passenger aircraft and may not exceed a maximum net quantity per package of 15 kg (33 pounds) on cargo aircraft.

A6 For combination packagings, if plastic inner packagings are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.

A7 Steel packagings must be corrosion-resistant or have protection against corrosion.

A8 For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with cushioning material in tightly closed metal receptacles before packing in outer packagings.

A9 For combination packagings, if plastic bags are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.

A10 When aluminum or aluminum alloy construction materials are used, they must be resistant to corrosion.

A11 For combination packagings, when metal inner packagings are permitted, only specification cylinders constructed of metals which are compatible with the hazardous material may be used.

A13 Non-bulk packagings conforming to § 173.197 of this subchapter not exceeding 16 kilograms (35 pounds) gross mass containing only used sharps

are permitted for transportation by aircraft. Maximum liquid content in each inner packaging may not exceed 50 milliliters (1.7 ounces).

A14 Non-bulk packagings of regulated medical waste conforming to § 173.197 of this subchapter not exceeding 16 kilograms (35 pounds) gross mass for solid waste or 12 liters (3 gallons) total volume for liquid waste may be transported by passenger and cargo aircraft when means of transportation other than air are impracticable or not available.

A19 Combination packagings consisting of outer fiber drums or plywood drums, with inner plastic packagings, are not authorized for transportation by aircraft.

A20 Plastic bags as inner receptacles of combination packagings are not authorized for transportation by aircraft.

A29 Combination packagings consisting of outer expanded plastic boxes with inner plastic bags are not authorized for transportation by aircraft.

A30 Ammonium permanganate is not authorized for transportation on aircraft.

A34 Aerosols containing a corrosive liquid in Packing Group II charged with a gas are not permitted for transportation by aircraft.

A51 When transported by cargo-only aircraft, an oxygen generator must conform to the provisions of an approval issued under special Provision 60 and be contained in a packaging prepared and originally offered for transportation by the approval holder.

(3) *"B" codes.* These provisions apply only to bulk packagings:

Code / Special Provisions

B1 If the material has a flash point at or above 38° C (100° F) and below 93° C (200° F), then the bulk packaging requirements of § 173.241 of this subchapter are applicable. If the material has a flash point of less than 38° C (100° F), then the bulk packaging requirements of § 173.242 of this subchapter are applicable.

B2 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

B3 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks and DOT 57 portable tanks are not authorized.

B4 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

B5 Only ammonium nitrate solutions with 35 percent or less water that will remain completely in solution under all conditions of transport at a maximum lading temperature of 116 deg.C (240 deg.F) are authorized for transport in the following bulk packagings: MC 307, MC 312, DOT 407 and DOT 412 cargo tanks with at least 172 kPa (25 psig) design pressure. The packaging shall be designed for a working temperature of at least 121° C (250° F). Only Specifications MC 304, MC 307 or DOT 407 cargo tank motor vehicles are authorized for transportation by vessel.

B6 Packagings shall be made of steel.

B7 Safety relief devices are not authorized on multi-unit tank car tanks. Openings for safety relief devices shall be plugged or blank flanged.

B8 Packagings shall be made of nickel, stainless steel, or steel with nickel, stainless steel, lead or other suitable corrosion resistant metallic lining.

B9 Bottom outlets are not authorized.

B10 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks, and DOT 57 portable tanks are not authorized.

B11 Tank car tanks must have a test pressure of at least 2,068.5 kPa (300 psi). Cargo and portable tanks must have a design pressure of at least 1,207 kPa (175 psig).

B13 A nonspecification cargo tank motor vehicle authorized in § 173.247 of this subchapter must be at least equivalent in design and in construction to a DOT 406 cargo tank or MC 306 cargo tank (if constructed before August 31, 1995), except as follows:

a. Packagings equivalent to MC 306 cargo tanks are excepted from §§ 178.340-10, certification; 178.341-4, vents; and 178.341-5, emergency flow control.

b. Packagings equivalent to DOT 406 cargo tanks are excepted from §§ 178.345-7(d)(5), circumferential reinforcements; 178.345-14, marking; 178.345-15, certification; 178.346-10, pressure relief; and 178.346-11, outlets.

c. Packagings are excepted from the design stress limits at elevated temperatures, as described in the ASME Code. However, the design stress limits may not exceed 25 percent of the stress, as specified in the Aluminum Association's "Aluminum Standards and Data" (7th Edition June 1982), for 0 temper at the maximum design temperature of the cargo tank.

B14 Each bulk packaging, except a tank car or a multi-unit-tank car tank, must be insulated with an insulating material so that the overall thermal conductance at 15.5° C (60° F) is no more than 1.5333 kilojoules per hour per square meter per degree Celsius (0.075 Btu per hour per square foot per degree Fahrenheit) temperature differential. Insulating materials must not promote corrosion to steel when wet. Notwithstanding the requirements in § 171.14(b)(4)(ii) of this subchapter, compliance with this provision is delayed until October 1, 1994, for a bulk packaging containing a material poisonous by inhalation which, when in contact with moisture, becomes highly corrosive to the tank and could cause a degree of corrosion under an insulation blanket that would have an adverse effect on tank integrity.

B15 Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance.

B16 The lading must be completely covered with nitrogen, inert gas or other inert materials.

B18 Open steel hoppers or bins are authorized.

B23 Tanks must be made of steel that is rubber lined or unlined. Unlined tanks must be passivated before being placed in service. If unlined tanks are washed out with water, they must be repassivated prior to return to service. Lading in unlined tanks must be inhibited so that the corrosive effect on steel is not greater than that of hydrofluoric acid of 65 percent concentration.

B25 Packagings must be made from monel or nickel or monel-lined or nickel-lined steel.

B26 Tanks must be insulated. Insulation must be at least 100 mm (3.9 inches) except that the insulation thickness may be reduced to 51 mm (2 inches) over the exterior heater coils. Interior heating coils are not authorized. The packaging may not be loaded with a material outside of the packaging's design temperature range. In addition, the material also must be covered with an inert gas or the container must be filled with water to the tank's capacity. After unloading, the residual material also must be covered with an inert gas or the container must be filled with water to the tank's capacity.

B27 Tanks must have a service pressure of 1,034 kPa (150 psig). Tank car tanks must have a test pressure rating of 1,379 kPa (200 psi). Lading must be blanketed at all times with a dry inert gas at a pressure not to exceed 103 kPa (15 psig).

B28 Packagings must be made of stainless steel.

B30 MC 312, MC 330, MC 331 and DOT 412 cargo tanks and DOT 51 portable tanks must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of § 173.24b(b) of this subchapter. Thickness of stainless steel for tank shell and heads for cargo tanks and portable tanks must be the greater of 7.62 mm (0.300 inch) or the thickness required for a tank with a design pressure at least equal to 1.5 times the vapor pressure of the lading at 46° C (115° F). In addition, MC 312 and DOT 412 cargo tank motor vehicles must:

a. Be ASME Code (U) stamped for 100% radiography of all pressure-retaining welds;
b. Have accident damage protection which conforms with § 178.345-8 of this subchapter;
c. Have a MAWP or design pressure of at least 87 psig: and
d. Have a bolted manway cover.

B32 MC 312, MC 330, MC 331, DOT 412 cargo tanks and DOT 51 portable tanks must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of § 173.24b(b) of this subchapter. Thickness of stainless steel for tank shell and heads for cargo tanks and portable tanks must be the greater of 6.35 mm (0.250 inch) or the thickness required for a tank with a design pressure at least equal to 1.3 times the vapor pressure of the lading at 46° C (115° F). In addition, MC 312 and DOT 412 cargo tank motor vehicles must:

a. Be ASME Code (U) stamped for 100% radiography of all pressure-retaining welds;
b. Have accident damage protection which conforms with § 178.345-8 of this subchapter;
c. Have a MAWP or design pressure of at least 87 psig; and
d. Have a bolted manway cover.

B33 MC 300, MC 301, MC 302, MC 303, MC 305, MC 306, and DOT 406 cargo tanks equipped with a 1 psig normal vent used to transport gasoline must conform to Table 1 of this Special Provision. Based on the volatility class determined by using ASTM D439 and the Reid vapor pressure (RVP) of the particular gasoline, the maximum lading pressure and maximum ambient temperature permitted during the loading of gasoline may not exceed that listed in Table I.

TABLE I—MAXIMUM AMBIENT TEMPERATURE—GASOLINE

ASTM D439 volatility class	Maximum lading and ambient temperature (see note 1)
A (RVP <= 9.0 psia)	131° F
B (RVP <= 10.0 psia)	124° F
C (RVP <= 11.5 psia)	116° F
D (RVP <= 13.5 psia)	107° F
E (RVP <= 15.0 psia)	100° F

AANote 1: Based on maximum lading pressure of 1 psig at top of cargo tank.

B35 Tank cars containing hydrogen cyanide may be alternatively marked "Hydrocyanic acid, liquefied" if otherwise conforming to marking requirements in subpart D of this part. Tank cars marked "HYDROCYANIC ACID" prior to October 1, 1991 do not need to be remarked.

B37 The amount of nitric oxide charged into any tank car tank may not exceed 1,379 kPa (200 psig) at 21° C (70° F).

B42 Tank cars must have a test pressure of 34.47 Bar (500 psig) or greater and conform to Class 105J. Each tank car must have a safety relief device having a start-to-discharge pressure of 10.34 Bar (150 psig). The tank car specification may be marked to indicate a test pressure of 13.79 Bar (200 psig).

B44 All parts of valves and safety relief devices in contact with lading must be of a material which will not cause formation of acetylides.

B45 Safety relief valves must be equipped with stainless steel or platinum frangible discs approved by the AAR Committee on Tank Cars.

B46 The detachable protective housing for the loading and unloading valves of multi-unit tank car tanks must withstand tank test pressure and must be approved by the Associate Administrator for Hazardous Materials Safety.

B47 A safety relief device with a start-to-discharge pressure setting of 310 kPa (45 psig) is permitted.

B48 Portable tanks in sodium metal service may be visually inspected at least once every 5 years instead of being retested hydrostatically. Date of the visual inspection must be stenciled on the tank near the other required markings.

B49 Tanks equipped with interior heater coils are not authorized. Single unit tank car tanks must have a safety relief valve set at no more than 1551 kPa (225 psig).

B50 Each valve outlet of a multi-unit tank car tank must be sealed by a threaded solid plug or a threaded cap with inert luting or gasket material. Valves must be of stainless steel and the caps, plugs, and valve seats must be of a material that will not deteriorate as a result of contact with the lading.

B52 Notwithstanding the provisions of § 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

B53 Except for IBCs, packagings must be made of either aluminum or steel.

B54 Open-top, sift-proof rail cars are also authorized.

B55 Water-tight, sift-proof, closed-top, metal-covered hopper cars, equipped with a venting arrangement (including flame arrestors) approved by the Associate Administrator for Hazardous Materials Safety are also authorized.

B56 Water-tight, sift-proof, closed-top, metal-covered hopper cars are also authorized if the particle size of the hazardous material is not less than 149 microns.

B57 Class 115A tank car tanks used to transport chloroprene must be equipped with a safety vent of a diameter not less than 305 mm (12 inches) with a maximum rupture disc pressure of 45 psi.

B59 Water-tight, sift-proof, closed-top, metal-covered hopper cars are also authorized provided that the lading is covered with a nitrogen blanket.

B60 DOT Specification 106A500X multi-unit tank car tanks that are not equipped with a safety relief device of any type are authorized. For the transportation of phosgene, the outage must be sufficient to prevent tanks from becoming liquid full at 55° C (130° F).

B61 Written procedures covering details of tank car appurtenances, dome fittings, safety devices, and marking, loading, handling, inspection, and testing practices must be approved by the Associate Administrator for Hazardous Materials Safety before any single unit tank car tank is offered for transportation.

B64 Each single unit tank car tank built after December 31, 1990 must be equipped with a tank head puncture resistance system that conforms to § 179.16 of this subchapter.

B65 Tank cars must have a test pressure of 34.47 Bar (500 psig) or greater and conform to Class 105A. Each tank car must have a pressure relief device having a start-to-discharge pressure of 15.51 Bar (225 psig). The tank car specification may be marked to indicate a test pressure of 20.68 Bar (300 psig).

B66 Each tank must be equipped with gas tight valve protection caps. Outage must be sufficient to prevent tanks from becoming liquid full at 55° C (130° F). Specification 110A500W tanks must be stainless steel.

B67 All valves and fittings must be protected by a securely attached cover made of metal not subject to deterioration by the lading, and all valve openings, except safety valve, must be fitted with screw plugs or caps to prevent leakage in the event of valve failure.

B68 Sodium must be in a molten condition when loaded and allowed to solidify before shipment. Outage must be at least 5 percent at 98° C (208° F). Bulk packagings must have exterior heating coils fusion welded to the tank shell which have been properly stress relieved. The only tank car tanks authorized are Class DOT 105 tank cars having a test pressure of 2,069 kPa (300 psig) or greater.

B69 Dry sodium cyanide or potassium cyanide may be shipped in sift-proof weather-resistant metal covered hopper cars, covered motor vehicles, portable tanks or non-specification bins. Bins must be approved by the Associate Administrator for Hazardous Materials Safety. Flexible intermediate bulk containers (FIBCs) may also be used under conditions approved by the Associate Administrator for Hazardous Materials Safety.

B70 If DOT 103ANW tank car tank is used: All cast metal in contact with the lading must have 96.7 percent nickel content; and the lading must be anhydrous and free from any impurities.

B71 Tank cars must have a test pressure of 20.68 Bar (300 psig) or greater and conform to Class 105, 112, 114 or 120.

B72 Tank cars must have a test pressure of 34.47 Bar (500 psig) or greater and conform to Class 105J, 106, or 110.

B74 Tank cars must have a test pressure of 20.68 Bar (300 psig) or greater and conform to Class 105S, 106, 110, 112J, 114J or 120S.

B76 Tank cars must have a test pressure of 20.68 Bar (300 psig) or greater and conform to Class 105S, 112J, 114J or 120S. Each tank car must have a safety relief device having a start-to-discharge pressure of 10.34 Bar (150 psig). The tank car specification may be marked to indicate a test pressure of 13.79 Bar (200 psig).

B77 Other packaging are authorized when approved by the Associate Administrator for Hazardous Materials Safety.

B78 Tank cars must have a test pressure of 4.14 Bar (60 psig) or greater and conform to Class 103, 104, 105, 109, 111, 112, 114 or 120. Heater pipes must be of welded construction designed for a test pressure of 500 pounds per square inch. A 25 mm

(1 inch) woven lining of asbestos or other approved material must be placed between the bolster slabbing and the bottom of the tank. If a tank car tank is equipped with a safety vent of the frangible disc type, the frangible disc must be perforated with a 3.2 mm (0.13 inch) diameter hole. If a tank car tank is equipped with a safety relief valve, the tank car tank must also be equipped with a vacuum relief valve.

B80 Each cargo tank must have a minimum design pressure of 276 kPa (40 psig).

B81 Venting and pressure relief devices for tank car tanks and cargo tanks must be approved by the Associate Administrator for Hazardous Materials Safety.

B82 Cargo tanks and portable tanks are not authorized.

B83 Bottom outlets are prohibited on tank car tanks transporting sulfuric acid in concentrations over 65.25 percent.

B84 Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance for sulfuric acid or spent sulfuric acid in concentration up to 65.25 percent.

B85 Cargo tanks must be marked with the name of the lading in accordance with the requirements of § 172.302(b).

B90 Steel tanks conforming or equivalent to ASME specifications which contain solid or semisolid residual motor fuel antiknock mixture (including rust, scale, or other contaminants) may be shipped by rail freight or highway. The tank must have been designed and constructed to be capable of withstanding full vacuum. All openings must be closed with gasketed blank flanges or vapor tight threaded closures.

B100 Intermediate bulk containers are not authorized.

B101 Authorized only in metal intermediate bulk containers.

B103 If an intermediate bulk container is used, the package must be transported in a closed freight container or transport vehicle.

B104 Intermediate bulk containers must be provided with a device to allow venting during transport. The inlet to the pressure relief valve must communicate with the vapor space of the packaging and lading during transport.

B105 Authorized only in rigid intermediate bulk containers.

B106 Authorized in intermediate bulk containers that are vapor tight.

B108 Authorized in sift-proof, water-resistant flexible, fiberboard or wooden intermediate bulk containers; packed in a closed transport vehicle.

B109 Not authorized in flexible intermediate bulk containers.

B110 This material also may be packaged in IBCs authorized in § 173.242(d) of this subchapter.

B115 Rail cars, highway trailers, roll-on/roll-off bins, or other non-specification bulk packagings are authorized. Packagings must be sift-proof, prevent liquid water from reaching the hazardous material, and be provided with sufficient venting to preclude dangerous accumulation of flammable, corrosive, or toxic gaseous emissions such as methane, hydrogen, and ammonia. The material must be loaded dry.

(4) *"H" codes.* These provisions apply only to transportation by highway. [Reserved]

(5) *"N" codes.* These provisions apply only to non-bulk packagings:

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.

N9 If the substance is impregnated with less than 5% oil, it is excepted from the labeling requirements of subpart D of this part and the packaging tests of subpart M of part 178 of this subchapter.

N10 Lighters and their inner packagings, which have been approved by the Associate Administrator for Hazardous Materials Safety (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.

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.
N71 Combination packagings consisting of inner glass packagings of not over 1.0 L (0.3 gallon) capacity each or inner metal packagings of not over 5.0 L (1 gallon) capacity each, placed in strong outer packagings, are authorized. Packagings are not subject to the requirements of part 178 of this subchapter.
N72 Packagings must be examined by the Bureau of Explosives and approved by the Associate Administrator for Hazardous Materials Safety.
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 nonfragile 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.

(6) *"R" codes.* These provisions apply only to transportation by rail. [Reserved]

(7) *"T" codes.* These provisions apply only to transportation in IM portable tanks. They are divided into two groupings, one of which appears as IM Tank Configurations in paragraph (c)(7)(i) of this section, and the second of

(1) Each subsequent carrier accepting the waste for transportation, at the time of acceptance, and

(2) The designated facility receiving the waste, upon receipt.

(e) A copy of the manifest bearing all required dates and signatures must be:

(1) Given to a person representing each carrier accepting the waste for transportation,

(2) Carried during transportation in the same manner as required by this subchapter for shipping papers,

(3) Given to a person representing the designated facility receiving the waste,

(4) Returned to the shipper (generator) by the carrier that transported the waste from the United States to a foreign destination with a notation of the date of departure from the United States, and

(5) Retained by the shipper (generator) and by the initial and each subsequent carrier for three years from the date the waste was accepted by the initial carrier. Each retained copy must bear all required signatures and dates up to and including those entered by the next person who received the waste.

(f) *Transportation by rail.* Notwithstanding the requirements of paragraphs (d) and (e) of this section, the following requirements apply:

(1) When accepting hazardous waste from a non-rail transporter, the initial rail transporter must:

(i) Sign and date the manifest acknowledging acceptance of the hazardous waste;

(ii) Return a signed copy of the manifest to the non-rail transporter;

(iii) Forward at least three copies of the manifest to:

(A) The next non-rail transporter, if any;

(B) The designated facility, if the shipment is delivered to that facility by rail; or

(C) The last rail transporter designated to handle the waste in the United States; and

(iv) Retain one copy of the manifest and rail shipping paper in accordance with 40 CFR 263.22.

(2) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification and signatures) and, for exports, an EPA Acknowledgment of Consent accompanies the hazardous waste at all times. Intermediate rail transporters are not required to sign either the manifest or shipping paper.

(3) When delivering hazardous waste to the designated facility, a rail transporter must:

(i) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and

(ii) Retain a copy of the manifest or signed shipping paper in accordance with 40 CFR 263.22.

(4) When delivering hazardous waste to a non-rail transporter, a rail transporter must:

(i) Obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and

(ii) Retain a copy of the manifest in accordance with 40 CFR 263.22.

(5) Before accepting hazardous waste from a rail transporter, a non-rail transporter must sign and date the manifest and provide a copy to the rail transporter.

(g) The person delivering a hazardous waste to an initial rail carrier shall send a copy of the manifest, dated and signed by a representative of the rail carrier, to the person representing the designated facility.

(h) A hazardous waste manifest required by 40 CFR part 262, containing all of the information required by this subpart, may be used as the shipping paper required by this subpart.

[Amdt. 172-58, 45 FR 34698, May 22, 1980, as amended by Amdt. 172-90, 49 FR 10510, Mar. 20, 1984; 49 FR 11184, Mar. 26, 1984; Amdt. 172-248, 61 FR 28675, June 5, 1996]

Subpart D—Marking

§172.300 Applicability.

(a) Each person who offers a hazardous material for transportation shall mark each package, freight container, and transport vehicle containing the hazardous material in the manner required by this subpart.

(b) When assigned the function by this subpart, each carrier that transports a hazardous

material shall mark each package, freight container, and transport vehicle containing the hazardous material in the manner required by this subpart.

[Amdt. 172-101, 45 FR 74666, Nov. 10, 1980]

§172.301 General marking requirements for non-bulk packagings.

(a) *Proper shipping name and identification number.*

(1) Except as otherwise provided by this subchapter, each person who offers for transportation a hazardous material in a non-bulk packaging shall mark the package with the proper shipping name and identification number (preceded by "UN" or "NA", as appropriate) for the material as shown in the § 172.101 Table. Identification numbers are not required on packages which contain only limited quantities, as defined in § 171.8 of this subchapter, or ORM-D materials.

(2) The proper shipping name for a hazardous waste (as defined in § 171.8 of this subchapter) is not required to include the word "waste" if the package bears the EPA marking prescribed by 40 CFR 262.32.

(3) *Large quantities of hazardous materials in non-bulk packages.* A transport vehicle or freight container that is loaded at one loading facility with 4,000 kg (8,820 pounds) or more aggregate gross weight of hazardous materials in non-bulk packagings, when all the hazardous materials loaded in the transport vehicle or freight container have the same proper shipping name and identification number, must be marked with the identification number specified for the hazardous material in the § 172.101 Table on each side and each end as specified in §§ 172.332 or 172.336. The requirement in this paragraph (a)(3) does not apply to:

(i) Class 1, Class 7, or ORM–D materials; or

(ii) Limited quantities or small quantities of hazardous materials (see § 173.4 of this subchapter).

(b) *Technical names.* In addition to the marking required by paragraph (a) of this section, each non-bulk packaging containing hazardous materials subject to the provisions of § 172.203(k) of this part shall be marked with the technical name in parentheses in association with the proper shipping name in accordance with the requirements and exceptions specified for display of technical descriptions on shipping papers in § 172.203(k) of this part.

(c) *Exemption packagings.* The outside of each package authorized by an exemption shall be plainly and durably marked "DOT-E" followed by the exemption number assigned.

(d) *Consignee's or consignor's name and address.* Each person who offers for transportation a hazardous material in a non-bulk package shall mark that package with the name and address of the consignor or consignee except when the package is-

(1) Transported by highway only and will not be transferred from one motor carrier to another; or

(2) Part of a carload lot, truckload lot or freight container load, and the entire contents of the rail car, truck or freight container are shipped from one consignor to one consignee.

(e) *Previously marked packagings.* A package which has been previously marked as required for the material it contains and on which the marking remains legible, need not be remarked. (For empty packagings, see § 173.29 of this subchapter.)

(f) *Marking exceptions.*

[Amdt. 172-123, 55 FR 52590, Dec. 21, 1990; 62 FR 1217, Jan. 08, 1997; 62 FR 39404, July 22, 1997]

§172.302 General marking requirements for bulk packagings.

(a) *Identification numbers.* Except as otherwise provided in this subpart, no person may offer for transportation or transport a hazardous material in a bulk packaging unless the packaging is marked as required by § 172.332 with the identification number specified for the material in the § 172.101 Table–

(1) On each side and each end, if the packaging has a capacity of 3,785 L (1,000 gallons) or more;

(2) On two opposing sides, if the packaging has a capacity of less than 3,785 L (1,000 gallons); or

(3) For cylinders permanently installed on a tube trailer motor vehicle, on each side and each end of the motor vehicle.

(b) *Size of markings.* Except as otherwise provided, markings required by this subpart on bulk packagings must–

(1) Have a width of at least 6.0 mm (0.24 inch) and a height of at least 100 mm (3.9 inches) for rail cars;

(2) Have a width of at least 4.0 mm (0.16 inch) and a height of at least 25 mm (one inch) for portable tanks with capacities of less than 3,785 L (1,000 gallons) and intermediate bulk containers; and

(3) Have a width of at least 6.0 mm (0.24 inch) and a height of at least 50 mm (2.0 inches) for cargo tanks and other bulk packagings.

(c) *Exemption packagings.* The outside of each bulk package used under the terms of an exemption shall be plainly and durably marked "DOT-E" followed by the exemption number assigned.

(d) Each bulk packaging marked with a proper shipping name, common name or identification number as required by this subpart must remain marked when it is emptied unless it is–

(1) Sufficiently cleaned of residue and purged of vapors to remove any potential hazard; or

(2) Refilled, with a material requiring different markings or no markings, to such an extent that any residue remaining in the packaging is no longer hazardous.

(e) Additional requirements for marking portable tanks, cargo tanks, tank cars, multi-unit tank car tanks, and other bulk packagings are prescribed in §§ 172.326, 172.328, 172.330, and 172.331, respectively, of this subpart.

(f) A bulk packaging marked prior to October 1, 1991, in conformance to the regulations of this subchapter in effect on September 30, 1991, need not be remarked if the key words of the proper shipping name are identical to those currently specified in the § 172.101 Table. For example, a tank car marked "ANHYDROUS AMMONIA" need not be remarked "ANHYDROUS AMMONIA, LIQUEFIED".

(g) A rail car, freight container, truck body or trailer in which the lading has been fumigated with any hazardous material, or is undergoing fumigation, must be marked as specified in § 173.9 of this subchapter.

[Amdt. 172-123, 55 FR 52591, Dec. 21, 1990, as amended at 56 FR 66254, Dec. 20, 1991; Amdt. 172-150, 61 FR 50624, Sept. 26, 1996; 62 FR 1217, Jan. 08, 1997]

§172.303 Prohibited marking.

(a) No person may offer for transportation or transport a package which is marked with the proper shipping name or identification number of a hazardous material unless the package contains the identified hazardous material or its residue.

(b) This section does not apply to–

(1) Transportation of a package in a transport vehicle or freight container if the package is not visible during transportation and is loaded by the shipper and unloaded by the shipper or consignee.

(2) Markings on a package which are securely covered in transportation.

(3) The marking of a shipping name on a package when the name describes a material not regulated under this subchapter.

[Amdt. 172-123, 55 FR 52591, Dec. 21, 1990, as amended at 56 FR 66254, Dec. 20, 1991]

§172.304 Marking requirements.

(a) The marking required in this subpart

(1) Must be durable, in English and printed on or affixed to the surface of a package or on a label, tag, or sign.

(2) Must be displayed on a background of sharply contrasting color;

(3) Must be unobscured by labels or attachments; and

(4) Must be located away from any other marking (such as advertising) that could substantially reduce its effectiveness.

[Amdt. 172-29, 41 FR 15996, Apr. 15, 1976, as amended by Amdt. 172-29B, 41 FR 57067, Dec. 30, 1976]

§172.306 [Reserved]

§172.308 Authorized abbreviations.

(a) Abbreviations may not be used in a proper shipping name marking except as authorized in this section.

§172.313 Poisonous hazardous materials.

In addition to any other markings required by this subpart:

(a) A material poisonous by inhalation (see § 171.8 of this subchapter) shall be marked "Inhalation Hazard" in association with the required labels or placards, as appropriate, and shipping name when required. The marking must be on two opposing sides of a bulk packaging. (See § 172.302(b) of this subpart for size of markings on bulk packages.) When the words "Inhalation Hazard" appear on the label, as prescribed in §§ 172.416 and 172.429, or placard, as prescribed in §§ 172.540 and 172.555, the "Inhalation Hazard" marking is not required on the package.

(b) Each non-bulk plastic outer packaging used as a single or composite packaging for materials meeting the definition of Division 6.1 (in § 173.132 of this subchapter) shall be permanently marked, by embossment or other durable means, with the word "POISON" in letters at least 6.3 mm (0.25 inch) in height. Additional text or symbols related to hazard warning may be included in the marking. The marking shall be located within 150 mm (6 inches) of the closure of the packaging.

(c) A transport vehicle or freight container loaded at one loading facility with more than 1,000 kg (2,205 pounds) aggregate gross weight of non-bulk packages containing materials poisonous by inhalation in Hazard Zone A and B having the same proper shipping name and identification number shall be marked as required by § 172.332 with the identification number specified for the material, in the § 172.101 Table, on each side and each end of the transport vehicle or freight container.

[Amdt. 172-123, 55 FR 52592, Dec. 21, 1990, as amended at 57 FR 46624, Oct. 9, 1992; 62 FR 1228, Jan. 08, 1997; 62 FR 39405, July 22, 1997; 62 FR 45702, Aug. 28, 1997]

§172.316 Packagings containing materials classed as ORM-D.

(a) Each non-bulk packaging containing a material classed as ORM-D must be marked on at least one side or end with the ORM-D designation immediately following or below the proper shipping name of the material. The ORM designation must be placed within a rectangle that is approximately 6.3 mm (0.25 inches) larger on each side than the designation. The designation for ORM-D must be:

(1) ORM-D-AIR for an ORM-D that is prepared for air shipment and packaged in accordance with the provisions of § 173.27 of this subchapter.

(2) ORM-D for an ORM-D other than as described in paragraph (a)(1) of this section.

(b) When the ORM-D marking including the proper shipping name can not be affixed on the package surface, it may be on an attached tag.

(c) 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 applicable regulations of this subchapter. This form of certification does not preclude the requirement for a certificate on a shipping paper when required by subpart C of this part.

[Amdt. 172-29, 41 FR 15996, Apr. 15, 1976, as amended by Amdt. 172-123, 55 FR 52592, Dec. 21, 1990; 56 FR 66254, Dec. 20, 1991]

§172.320 Explosive hazardous materials.

(a) Except as otherwise provided in paragraphs (b), (c), (d) and (e) of this section, each package containing a Class 1 material must be marked with the EX-number for each substance, article or device contained therein.

(b) Except for fireworks approved in accordance with § 173.56(j) of this subchapter, a package of Class 1 materials may be marked, in lieu of the EX-number required by paragraph (a) of this section, with a national stock number issued by the Department of Defense or identifying information, such as a product code required by regulations for commercial explosives specified in 27 CFR part 55, if the national stock number or identifying information can be specifically associated with the EX-number assigned.

(c) When more than five different Class 1 materials are packed in the same package, the package may be marked with only five of the

EX-numbers, national stock numbers, product codes, or combination thereof.

(d) The requirements of this section do not apply if the EX-number, product code or national stock number of each explosive item described under a proper shipping description is shown in association with the shipping description required by § 172.202(a) of this part. Product codes and national stock numbers must be traceable to the specific EX-number assigned by the Associate Administrator for Hazardous Materials Safety.

(e) The requirements of this section do not apply to the following Class 1 materials:

(1) Those being shipped to a testing agency in accordance with § 173.56(d) of this subchapter;

(2) Those being shipped in accordance with § 173.56(e) of this subchapter, for the purposes of developmental testing;

(3) Those which meet the requirements of § 173.56(h) of this subchapter and therefore are not subject to the approval process of § 173.56 of this subchapter;

(4) Until October 1, 1993, those which are shipped under § 171.19 of this subchapter; and

(5) Those that are transported in accordance with § 173.56(c)(2) of this subchapter and, therefore, are covered by a national security classification currently in effect.

[Amdt. 172-123, 56 FR 66254, Dec. 20, 1991, as amended by Amdt. 172-139, 59 FR 67487, Dec. 29, 1994]

§172.322 Marine pollutants.

(a) For vessel transportation of each nonbulk packaging that contains a marine pollutant–

(1) If the proper shipping name for a material which is a marine pollutant does not identify by name the component which makes the material a marine pollutant, the name of that component must be marked on the package in parentheses in association with the marked proper shipping name. Where two or more components which make a material a marine pollutant are present, the names of at least two of the components most predominantly contributing to the marine pollutant designation must appear in parentheses in association with the marked proper shipping name; and

(2) The MARINE POLLUTANT mark shall be placed in association with the hazard warning labels required by Subpart E of this Part or, in the absence of any labels, in association with the marked proper shipping name.

(b) A bulk packaging that contains a marine pollutant must-

(1) Be marked with the MARINE POLLUTANT mark on at least two opposing sides or two ends other than the bottom if the packaging has a capacity of less than 3,785 L (1,000 gallons). The mark must be visible from the direction it faces. The mark may be displayed in black lettering on a square-on-point configuration having the same outside dimensions as a placard; or

(2) Be marked on each end and each side with the MARINE POLLUTANT mark if the packaging has a capacity of 3,785 L (1,000 gallons) or more. The mark must be visible from the direction it faces. The mark may be displayed in black lettering on a square-on-point configuration having the same outside dimensions as a placard.

(c) A transport vehicle or freight container that contains a package subject to the marking requirements of paragraph (a) or (b) of this section must be marked with the MARINE POLLUTANT mark. The mark must appear on each side and each end of the transport vehicle or freight container, and must be visible from the direction it faces. This requirement may be met by the marking displayed on a freight container or portable tank loaded on a motor vehicle or rail car. This mark may be displayed in black lettering on a white square-on-point configuration having the same outside dimensions as a placard.

(d) The MARINE POLLUTANT mark is not required–

(1) On a combination package containing a severe marine pollutant (see appendix B to § 172.101), in inner packagings each of which contains:

(i) 0.5 liters (17 ounces) or less net capacity for liquids; or

(ii) 500 grams (17.6 ounces) or less net capacity for solids.

(5) For each of the different liquid petroleum distillate fuels, including gasoline and gasohol transported in a cargo tank, if the identification number is displayed for the liquid petroleum distillate fuel having the lowest flash point.

(6) On nurse tanks meeting the provisions of § 173.315(m) of this subchapter.

[Amdt. 172-101, 45 FR 74667, Nov. 10, 1980, as amended by Amdt. 172-74, 47 FR 40365, Sept. 30, 1982; Amdt. 172-109, 52 FR 13038, Apr. 20, 1987; Amdt. 172-110, 52 FR 29528, Aug. 10, 1987; Amdt. 172-123, 55 FR 52593, Dec. 21, 1990; 56 FR 66255, Dec. 20, 1991]

§172.338 Replacement of identification numbers.

If more than one of the identification number markings on placards, orange panels, or white square-on-point display configurations that are required to be displayed are lost, damaged or destroyed during transportation, the carrier shall replace all the missing or damaged identification numbers as soon as practicable. However, in such a case, the numbers may be entered by hand on the appropriate placard, orange panel or white square-on-point display configuration providing the correct identification numbers are entered legibly using an indelible marking material. When entered by hand, the identification numbers must be located in the white display area specified in § 172.332. This section does not preclude required compliance with the placarding requirements of subpart F of this subchapter.

[Amdt. 172-110, 52 FR 29528, Aug. 10, 1987]

Subpart E—Labeling

§172.400 General labeling requirements.

(a) Except as specified in § 172.400a, each person who offers for transportation or transports a hazardous material in any of the following packages or containment devices, shall label the package or containment device with labels specified for the material in the § 172.101 Table and in this subpart:

(1) A non-bulk package;

(2) A bulk packaging, other than a cargo tank, portable tank, or tank car, with a volumetric capacity of less than 18m3 (640 cubic feet), unless placarded in accordance with subpart F of this part;

(3) A portable tank of less than 3785 L (1000 gallons) capacity, unless placarded in accordance with subpart F of this part;

(4) A DOT Specification 106 or 110 multi-unit tank car tank, unless placarded in accordance with subpart F of this part; and

(5) An overpack, freight container or unit load device, of less than 18 m3 (640 cubic feet), which contains a package for which labels are required, unless placarded or marked in accordance with § 172.512 of this part.

(b) Labeling is required for a hazardous material which meets one or more hazard class definitions, in accordance with Column 6 of the § 172.101 Table and the following table:

Hazard class or division	Label name	Label design or section reference
1.1	EXPLOSIVES 1.1....	172.411
1.2	EXPLOSIVES 1.2....	172.411
1.3	EXPLOSIVES 1.3....	172.411
1.4	EXPLOSIVES 1.4....	172.411
1.5	EXPLOSIVES 1.5....	172.411
1.6	EXPLOSIVES 1.6....	172.411
2.1	FLAMMABLE GAS..	172.417
2.2	NONFLAMMABLE GAS.	172.415
2.3	POISON GAS.....	172.416
3 (flammable liquid) Combustible liquid.	FLAMMABLE LIQUID (none).	172.419
4.1	FLAMMABLE SOLID.	172.420
4.2	SPONTANEOUSLY COMBUSTIBLE.	172.422
4.3	DANGEROUS WHEN WET.	172.423
5.1	OXIDIZER	172.426
5.2	ORGANIC PEROXIDE.	172.427
6.1 (inhalation hazard, Zone A or B).	POISON INHALATION HAZARD.	172.429
6.1 (PG I or II, other than Zone A or B inhalation hazard).	POISON	172.430
6.1 (PG III).....	KEEP AWAY FROM FOOD.	172.431
6.2	INFECTIOUS SUBSTANCE[1].	172.432

Labeling

Hazard class or division	Label name	Label design or section reference
7 (see § 172.403)...	RADIOACTIVE WHITE-I.	172.436
7	RADIOACTIVE YELLOW-II.	172.438
7	RADIOACTIVE YELLOW-III.	172.440
7 (empty packages, see § 173.427).	EMPTY	172.450
8	CORROSIVE	172.442
9	CLASS 9	172.446

[1] The ETIOLOGIC AGENT label specified in regulations of the Department of Health and Human Services at 42 CFR 72.3 may apply to packages of infectious substances.

[Amdt. 172-123, 55 FR 52593, Dec. 21, 1990, as amended at 56 FR 66255, Dec. 20, 1991; 62 FR 1217, Jan. 08, 1997; 62 FR 39405, July 22, 1997]

§172.400a Exceptions from labeling.

(a) Notwithstanding the provisions of § 172.400, a label is not required on-

(1) A cylinder, or a Dewar flask conforming to § 173.320 of this subchapter containing a Division 2.1 or Division 2.2 gas that is–

(i) Not poisonous;

(ii) Carried by a private or contract motor carrier;

(iii) Not overpacked; and

(iv) Durably and legibly marked in accordance with CGA Pamphlet C-7, appendix A.

(2) A package or unit of military explosives (including ammunition) shipped by or on behalf of the DOD when in–

(i) Freight containerload, carload or truckload shipments, if loaded and unloaded by the shipper or DOD; or

(ii) Unitized or palletized break-bulk shipments by cargo vessel under charter to DOD if at least one required label is displayed on each unitized or palletized load.

(3) A package containing a hazardous material other than ammunition that is–

(i) Loaded and unloaded under the supervision of DOD personnel, and

(ii) Escorted by DOD personnel in a separate vehicle.

(4) A compressed gas cylinder permanently mounted in or on a transport vehicle.

(5) A freight container, aircraft unit load device or portable tank, which–

(i) Is placarded in accordance with subpart F of this part, or

(ii) Conforms to paragraph (a)(3) or (b)(3) of § 172.512.

(6) An overpack or unit load device in or on which labels representative of each hazardous material in the overpack or unit load device are visible.

(7) A package of low specific activity radioactive material, when transported under § 173.425(b) of this subchapter.

(b) Certain exceptions to labeling requirements are provided for small quantities and limited quantities in applicable sections in part 173 of this subchapter.

(c) Notwithstanding the provisions of § 172.402(a), a subsidiary hazard label is not required on a package containing a Class 8 (corrosive) material which has a subsidiary hazard of Division 6.1 (poisonous) if the toxicity of the material is based solely on the corrosive destruction of tissue rather than systemic poisoning.

(d) For Division 6.1 Packing Group III materials, a POISON label may be used in place of a KEEP AWAY FROM FOOD label.

[Amdt. 172-123, 55 FR 52594, Dec. 21, 1990, as amended by Amdt. 172-132, 58 FR 50501, Sept. 27, 1993; 172-130, 58 FR 51531, Oct. 1, 1993; Amdt. 172-139, 59 FR 67490, Dec. 29, 1994; Amdt. 172-145, 60 FR 49110, Sept. 21, 1995]

§172.401 Prohibited labeling.

(a) Except as otherwise provided in this section, no person may offer for transportation and no carrier may transport a package bearing a label specified in this subpart unless:

(1) The package contains a material that is a hazardous material, and

(2) The label represents a hazard of the hazardous material in the package.

(b) No person may offer for transportation and no carrier may transport a package bearing any marking or label which by its color, design, or shape could be confused with or conflict with a label prescribed by this part.

(c) The restrictions in paragraphs (a) and (b) of this section, do not apply to packages labeled in conformance with:

(1) Any United Nations recommendation, including the class number (see § 172.407), in the document entitled *"Transport of Dangerous Goods."*;

(2) The International Maritime Organization (IMO) requirements, including the class number (see § 172.407), in the document entitled "International Maritime Dangerous Goods Code";

(3) The ICAO Technical Instructions; or

(4) The TDG Regulations.

(d) The provisions of paragraph (a) of this section do not apply to a packaging bearing a label if that packaging is:

(1) Unused or cleaned and purged of all residue;

(2) Transported in a transport vehicle or freight container in such a manner that the packaging is not visible during transportation; and

(3) Loaded by the shipper and unloaded by the shipper or consignee.

[Amdt. 172-9, 41 FR 15996, Apr. 15, 1976, as amended by Amdt. 172-75, 47 FR 44471, Oct. 7, 1982; Amdt. 172-77, 47 FR 54822, Dec. 6, 1982; Amdt. 172-94, 49 FR 38134, Sept. 27, 1984; Amdt. 172-100, 50 FR 41521, Oct. 11, 1985; Amdt. 172-123, 55 FR 52594, Dec. 21, 1990; Amdt. 172-132, 58 FR 50501, Sept. 27, 1993]

§172.402 Additional labeling requirements.

(a) *Subsidiary hazard labels.* Each package containing a hazardous material–

(1) Shall be labeled with primary and subsidiary hazard labels as specified in Column 6 of the § 172.101 Table (unless excepted in paragraph (a)(2) of this section); and

(2)For other than Class 1 or Class 2 materials (for subsidiary labeling requirements for Class 1 or Class 2 materials see paragraph (e) or paragraphs (f) and (g), respectively, of this section), if not already labeled under paragraph (a)(1) of this section, shall be labeled with subsidiary hazard labels in accordance with the following table:

SUBSIDIARY HAZARD LABELS

Subsidiary hazard level (packing group)	Subsidiary Hazard (Class or Division)						
	3	4.1	4.2	4.3	5.1	6.1	8
I	X	***	***	X	X	X	X
II	X	X	X	X	X	X	X
III	*	X	X	X	X	X	X

X–Required for all modes

*–Required for all modes, except for a material with a flash point at or above 38° C (100° F) transported by rail or highway.

**–[Reserved]

***–Impossible as subsidiary hazard

(b) *Display of hazard class on labels.* The appropriate hazard class or, for Division 5.1 or 5.2 the division number, shall be displayed in the lower corner of a primary hazard label and may not be displayed on a subsidiary label.

(c) *Cargo Aircraft Only label.* Each person who offers for transportation or transports by aircraft a package containing a hazardous material which is authorized on cargo aircraft only shall label the package with a CARGO AIRCRAFT ONLY label specified in § 172.448 of this subpart.

(d) *Class 7 (Radioactive) Materials.* Except as otherwise provided in this paragraph, each package containing a Class 7 material that also meets the definition of one or more additional hazard classes must be labeled as a Class 7 material as required by § 172.403 of this subpart and for each additional hazard. A subsidiary hazard label is not required on a package containing a Class 7 material that conforms to criteria specified in § 173.4 of this subchapter, except § 173.4(a)(1)(iv) of this subchapter.

(e) *Class 1 (explosive) Materials.* In addition to the label specified in Column 6 of the § 172.101 Table, each package of Class 1 material that also meets the definition for:

(1) Division 6.1, Packing Groups I or II, shall be labeled POISON or POISON INHALATION HAZARD, as appropriate.

(2) Class 7, shall be labeled in accordance with § 172.403 of this subpart.

(f) *Division 2.2 materials.* In addition to the label specified in Column 6 of the § 172.101 Table, each package of Division 2.2 material