

- T43 See entry for T43 in the IM Tank Configuration Table in paragraph (c)(7)(i) of this section.
- T44 DOT Specification IM 101 portable tanks shall 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 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).
- T45 DOT Specification IM 101 portable tanks shall 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 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).
- T46 IM portable tanks in sodium metal service are not required to be hydrostatically retested.
- T47 Temperature must be maintained between 18°C (64.4°F) and 40°C (104°F) when carried in tanks. Tanks containing solidified methacrylic acid may not be reheated during transport.

(8) “W” codes. These provisions apply only to transportation by water.
Code/Special Provisions

- W41 When offered for transportation by water, this material must be packaged in bales and be securely and tightly bound with rope, wire or similar means.

Subpart C — Shipping Papers

§172.200 Applicability.

(a) *Description of hazardous materials required.* Except as otherwise provided in this subpart, each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by this subpart.

(b) This subpart does not apply to any material, other than a hazardous substance, hazardous waste or marine pollutant, that is —

- (1) Identified by the letter “A” in Column 1 of the §172.101 Table, except when the material is offered or intended for transportation by air; or
- (2) Identified by the letter “W” in Column 1 of the §172.101 Table except then the material is offered or intended for transportation by water; or
- (3) An ORM-D, except when the material is offered or intended for transportation by air.

§172.201 General entries.

(a) *Contents.* When a description of hazardous material is required to be included on a shipping paper, that description must conform to the following requirements:

- (1) When a hazardous material and a material not subject to the requirements of this subchapter are described on the same shipping paper, the hazardous material description entries required by §172.202 and those additional entries that may be required by §172.203:
 - (i) Must be entered first, or
 - (ii) Must be entered in a color that clearly contrasts with any description on the shipping paper of a material not subject to the requirements of this subchapter, except that a description on a reproduction of a shipping paper may be highlighted, rather than printed, in a contrasting color (the provisions of this paragraph apply only to the basic description required by §172.202(a)(1) and (2), and (3)), or
 - (iii) Must be identified by the entry of an “X” placed before the proper shipping name in a column captioned “HM.” (The “X” may be replaced by “RQ,” if appropriate.)
- (2) The required shipping description on a shipping paper and all copies thereof used for transportation purposes, must be legible and printed (manually or mechanically) in English.
- (3) Unless it is specifically authorized or required in this subchapter, the required shipping description may not contain any code or abbreviation.
- (4) A shipping paper may contain additional information concerning the material provided the information is not inconsistent with the required description. Unless otherwise permitted or required by this subpart, additional information must be placed after the basic description required by §172.202(a).

(b) [Reserved]

(c) *Continuation page.* A shipping paper may consist of more than one page, if each page is consecutively numbered and the first page bears a notation

specifying the total number of pages included in the shipping paper. For example, “Page 1 of 4 pages.”

(d) *Emergency response telephone number.* Except as provided in §172.604(c), a shipping paper must contain an emergency response telephone number, as prescribed in subpart G of this part.

§172.202 Description of hazardous material on shipping papers.

(a) The shipping description of a hazardous material on the shipping paper must include:

- (1) The proper shipping name prescribed for the material in Column 2 of the §172.101 Table;
- (2) The hazard class or division prescribed for the material as shown in Column 3 of the §172.101 Table (class names or subsidiary hazard class or division number may be entered following the numerical hazard class, or following the basic description). The hazard class need not be included for the entry “Combustible liquid, n.o.s.”;
- (3) The identification number prescribed for the material as shown in Column 4 of the §172.101 Table;
- (4) The packing group, in Roman numerals, prescribed for the material in Column 5 of the §172.101 Table, if any. The packing group may be preceded by the letters “PG” (e.g., “PG II”); and
- (5) Except for empty packagings (see §173.29 of this subchapter), cylinders for Class 2 (compressed gases) materials, and bulk packagings, the total quantity (by net or gross mass, capacity, or as otherwise appropriate), including the unit of measurement, of the hazardous material covered by the description (e.g., “800 lbs”, “55 gal.”, “3629 kg”, or “208 L”). For cylinders for Class 2 (compressed gases) materials and bulk packagings, some indication of total quantity must be shown (e.g., “10 cylinders” or “1 cargo tank”).

(b) Except as provided in this subpart, the basic description specified in paragraphs (a)(1), (2), (3) and (4) of this section must be shown in sequence with no additional information interspersed. For example: “Gasoline, 3, UN 1203, PG II”.

(c) The total quantity of the material covered by one description must appear before or after, or both before and after, the description required and authorized by this subpart. The type of packaging and destination marks may be entered in any appropriate manner before or after the basic description. Abbreviations may be used to express units of measurement and types of packagings.

(d) Technical and chemical group names may be entered in parentheses between the proper shipping name and hazard class or following the basic description. An appropriate modifier, such as “contains” or “containing,” and/or the percentage of the technical constituent may be used. For example: “Flammable liquids, n.o.s. (contains Xylene and Benzene), 3, UN 1993, PG II”.

(e) Except for those materials in the UN Recommendations, the ICAO Technical Instructions, or the IMDG Code, a material that is not a hazardous material according to this subchapter may not be offered for transportation or transported when its description on a shipping paper includes a hazard class or an identification number specified in §172.101.

§172.203 Additional description requirements.

(a) *Exemptions.* Each shipping paper issued in connection with a shipment made under an exemption must bear the notation “DOT-E” followed by the exemption number assigned and so located that the notation is clearly associated with the description to which the exemption applies.

(b) *Limited quantities.* The description for a material offered for transportation as “limited quantity,” as authorized by this subchapter, must include the words “Limited Quantity” or “Ltd Qty” following the basic description.

(c) *Hazardous substances.*

(1) Except for Class 7 (radioactive) materials described in accordance with paragraph (d) of this section, if the proper shipping name for a material that is a hazardous substance does not identify the hazardous substance by name, the name of the hazardous substance must be entered in parentheses in association with the basic description. If the material contains two or more hazardous substances, at least two hazardous substances, including the two with the lowest reportable quantities (RQs), must be identified. For a hazardous waste, the waste code (e.g., D001), if appropriate, may be used to identify the hazardous substance.

(2) The letters “RQ” shall be entered on the shipping paper either before or after, the basic description required by §172.202 for each hazardous substance (see definition in 171.8 of this subchapter). For example: “RQ, Allyl alcohol,

6.1, UN 1098, I"; or "Environmentally hazardous substance, solid, n.o.s., 9, UN 3077, III, RQ (Adipic acid)".

(d) *Radioactive material.* The description for a shipment of a Class 7 (radioactive) material must include the following additional entries as appropriate:

(1) The name of each radionuclide in the Class 7 (radioactive) material that is listed in §173.435 of this subchapter. For mixtures of radionuclides, the radionuclides that must be shown must be determined in accordance with §173.433(f) of this subchapter.

(2) The name of each radionuclide in the Class 7 (radioactive) material that is listed in §173.435 of this subchapter. For mixtures of radionuclides, the radionuclides that must be shown must be determined in accordance with §173.433(f) of this subchapter. Abbreviations, e.g., "⁹⁹Mo", are authorized.

(3) A description of the physical and chemical form of the material, if the material is not in special form (generic chemical description is acceptable for chemical form).

(4) The activity contained in each package of the shipment in terms of the appropriate SI units (e.g. Becquerel, Terabecquerel, etc.) or in terms of the appropriate SI units followed by the customary units (e.g. Curies, millicuries, etc.). Alternatively, for domestic transportation, the activity in a package of Class 7 (radioactive) materials may be described solely in terms of curies until April 1, 1997. Abbreviations are authorized. Except for plutonium-238, plutonium-239, and plutonium-241, the weight in grams or kilograms of fissile radionuclides may be inserted instead of activity units. For plutonium-238, plutonium-239, and plutonium-241 the weight in grams or kilograms of fissile radionuclides may be inserted in addition to the activity units. For the shipment of a package containing a highway route controlled quantity of Class 7 (radioactive) materials (see §173.403 of this subchapter) the words "Highway route controlled quantity" must be entered in association with the basic description.

(5) The category of label applied to each package in the shipment. For example: "RADIOACTIVE WHITE-I."

(6) The transport index assigned to each package in the shipment bearing RADIOACTIVE YELLOW-II or RADIOACTIVE YELLOW-III labels.

(7) For a shipment of fissile Class 7 (radioactive) materials:

(i) The words "Fissile Excepted" if the package is excepted pursuant to §173.453 of this subchapter;

(ii) For a fissile material, controlled shipment, the additional notation: "Warning—Fissile material, controlled shipment. Do not load more than * * * packages per vehicle." (Asterisks to be replaced by appropriate number.) "In loading and storage areas, keep at least 6 meters (20 feet) from other packages bearing radioactive labels"; and

(iii) If a fissile material, controlled shipment is to be transported by water, the supplementary notation must also include the following statement: "For shipment by water, only one fissile material, controlled shipment is permitted in each hold."

(8) For a package approved by the U.S. Department of Energy (DOE) or U.S. Nuclear Regulatory Commission (USNRC), a notation of the package identification marking as prescribed in the applicable DOE or USNRC approval. (See §173.471 of the subchapter.)

(9) For an export shipment or a shipment in a foreign made package, a notation of the package identification marking as prescribed in the applicable International Atomic Energy Agency (IAEA) Certificate of Competent Authority which has been issued for the package. (See §173.473 of the subchapter.)

(10) For a shipment required by this subchapter to be consigned as exclusive use:

(i) An indication that the shipment is consigned as exclusive use; or

(ii) If all the descriptions on the shipping paper are consigned as exclusive use, then the statement "Exclusive Use Shipment" may be entered only once on the shipping paper in a clearly visible location.

(11) For a shipment of low specific activity material or surface contaminated objects, the appropriate group notation of LSA-I, LSA-II, LSA-III, SCO-I, or SCO-II.

(e) *Empty packagings.*

(1) The description on the shipping paper for a packaging containing the residue of a hazardous material may include the words "RESIDUE: Last Contained * * * " in association with the basic description of the hazardous material last contained in the packaging.

(2) The description on the shipping paper for a tank car containing the residue of a hazardous material must include the phrase, "RESIDUE: LAST CONTAINED * * * " before the basic description.

(f) *Transportation by air.* When a package containing a hazardous material is offered for transportation by air and this subchapter prohibits its transportation aboard passenger-carrying aircraft, the words "Cargo aircraft only" must be entered after the basic description.

(g) *Transportation by rail.*

(1) A shipping paper prepared by a rail carrier for a rail car, freight container, transport vehicle or portable tank that contains hazardous materials must include the reporting mark and number when displayed on the rail car, freight container, transport vehicle or portable tank.

(2) The shipping paper for each DOT-113 tank car containing a Division 2.1 material or its residue must contain an appropriate notation, such as "DOT 113", and the statement "Do not hump or cut off car while in motion."

(3) When shipments of elevated temperature materials are transported under the exception permitted in § 173.247(h)(3) of this subchapter, the shipping paper must contain an appropriate notation, such as "Maximum operating speed 15 mph."

(h) *Transportation by highway.* Following the basic description for a hazardous material in a Specification MC 330 or MC 331 cargo tank, there must be entered for —

(1) *Anhydrous ammonia.*

(i) The words "0.2 PERCENT WATER" to indicate the suitability for shipping anhydrous ammonia in a cargo tank made of quenched and tempered steel as authorized by §173.315(a), Note 14 of this subchapter, or

(ii) The words "NOT FOR Q and TANKS" when the anhydrous ammonia does not contain 0.2 percent or more water by weight.

(2) *Liquefied petroleum gas.*

(i) The word "NONCORROSIVE" or "NONCOR" to indicate the suitability for shipping "Noncorrosive" liquefied petroleum gas in a cargo tank made of quenched and tempered steel as authorized by §173.315(a), Note 15 of this subchapter, or

(ii) The words "NOT FOR Q and T TANKS" for grades of liquefied petroleum gas other than "Noncorrosive".

(i) *Transportation by water.* Each shipment by water must have the following additional shipping paper entries:

(1) Identification of the type of packagings such as barrels, drums, cylinders, and boxes.

(2) The number of each type of package including those in a freight container or on a pallet.

(3) The gross mass of each type of package or the individual gross mass of each package.

(4) The name of the shipper.

(j) [Reserved]

(k) *Technical names for "n.o.s." and other generic descriptions.* Unless otherwise excepted, if a material is described on a shipping paper by one of the proper shipping names listed in paragraph (k)(3) of this section, the technical name of the hazardous material must be entered in parentheses in association with the basic description. For example "Corrosive liquid, n.o.s., (Caprylyl chloride), 8, UN 1760, II", or "Corrosive liquid, n.o.s., 8, UN 1760, II (contains Caprylyl chloride)". The word "contains" may be used in association with the technical name, if appropriate. For organic peroxides which may qualify for more than one generic listing depending on concentration, the technical name must include the actual concentration being shipped or the concentration range for the appropriate generic listing. For example, "Organic peroxide type B, solid, 5.2, UN 3102 (dibenzoyl peroxide, 52-100%)" or "Organic peroxide type E, solid, 5.2, UN 3108, (dibenzoyl peroxide, paste, 52%)".

(1) In addition to the n.o.s. descriptions listed herein, the requirements of this section apply to all shipping descriptions for poisonous materials which are subject to the requirements of paragraph (m) of this section, and for which the proper shipping name does not specifically identify the poisonous constituent by technical name. For example, "Motor fuel antiknock mixtures (Tetraethyl lead), 6.1, UN 1649, I", or "Motor fuel antiknock mixtures, 6.1, UN 1649, I (Tetraethyl lead)".

(2) If a hazardous material is a mixture or solution of two or more hazardous materials, the technical names of at least two components most predominantly contributing to the hazards of the mixture or solution must be entered on the shipping paper as required by paragraph (k) of this section. For example, "Flammable liquid, corrosive, n.o.s., 3, UN 2924, II (contains Methanol, Potassium hydroxide)".

(3) Proper shipping names for which the provisions of this paragraph apply are as follows:

Alcoholates solution, n.o.s., *in alcohol*

Alcohols, toxic, n.o.s.

Aldehydes, toxic, n.o.s.

Alkali metal alcoholates, self-heating, corrosive, n.o.s.

Alkaline earth metal alcoholates, n.o.s.

Amines, flammable, corrosive, n.o.s. *or* Polyamines, flammable, corrosive, n.o.s.

Amines, liquid, corrosive, flammable, n.o.s. *or* Polyamines, liquid, corrosive, flammable, n.o.s.

Amines, liquid, corrosive, n.o.s. *or* Polyamines, liquid, corrosive, n.o.s.

Amines, solid, corrosive, n.o.s. *or* Polyamines, solid, corrosive, n.o.s.

Articles, explosive, n.o.s.

Caustic alkali liquids, n.o.s.

Charges, propelling

Chloroformates, toxic, corrosive, n.o.s.

Combustible liquid, n.o.s.

Components, explosive train, n.o.s.

Compounds, cleaning liquid, *corrosive, flammable, toxic*

Compounds, tree *or* weed killing, liquid, *flammable, corrosive, toxic*

Compressed gas, toxic, corrosive, n.o.s.

Compressed gas, toxic, flammable, corrosive, n.o.s.

Compressed gas, toxic, oxidizing, corrosive, n.o.s.

Compressed gas, toxic, oxidizing, n.o.s.

Compressed *or* Liquefied gases, flammable, n.o.s.

Compressed *or* Liquefied gases, n.o.s.

Compressed *or* Liquefied gases, oxidizing, n.o.s.

Compressed *or* Liquefied gases, toxic, flammable, n.o.s.

Compressed *or* Liquefied gases, toxic, n.o.s.

Contrivances, water-activated

Corrosive, liquid, acidic, inorganic *or* organic, n.o.s.

Corrosive, liquid, basic, inorganic *or* organic, n.o.s.

Corrosive liquids, flammable, n.o.s.

Corrosive liquids, n.o.s.

Corrosive liquids, oxidizing, n.o.s.

Corrosive liquids, toxic, n.o.s.

Corrosive liquids, water-reactive, n.o.s.

Corrosive, solid, acidic, inorganic *or* organic, n.o.s.

Corrosive, solid, basic, inorganic *or* organic, n.o.s.

Corrosive solids, flammable, n.o.s.

Corrosive solids, n.o.s.

Corrosive solids, oxidizing, n.o.s.

Corrosive solids, self-heating, n.o.s.

Corrosive solids, toxic, n.o.s.

Corrosive solids, water-reactive, n.o.s.

Disinfectants, liquid, corrosive, n.o.s.

Disinfectants, liquid, toxic, n.o.s.

Disinfectants, solids, toxic, n.o.s.

Dispersant gas, n.o.s. *Dyes, liquid, corrosive, n.o.s. or Dye intermediates, liquid, corrosive, n.o.s.*

Dyes, liquid, toxic, n.o.s. *or Dye intermediates, liquid, toxic, n.o.s.*

Dyes, solid, corrosive, n.o.s. *or Dye intermediates, solid, corrosive, n.o.s.*

Dyes, solid, toxic, n.o.s. *or Dye intermediates, solid, toxic, n.o.s.*

Environmentally hazardous substances, liquid *or* solid, n.o.s.

Flammable gases, solid, corrosive, n.o.s.

Flammable liquids, corrosive, n.o.s.

Flammable liquids, n.o.s.

Flammable liquids, toxic, corrosive, n.o.s.

Flammable liquids, toxic, n.o.s.

Flammable solids, corrosive, organic *or* inorganic, n.o.s.

Flammable solids, organic, molten, n.o.s.

Flammable solids, organic *or* inorganic, n.o.s.

Flammable solids, toxic, organic *or* inorganic, n.o.s.

Gas, refrigerated liquid, flammable, n.o.s.

Gas, refrigerated liquid, oxidizing, n.o.s.

Halogenated irritating liquids, n.o.s.

Hazardous waste, liquid *or* solid, n.o.s.

Hydrocarbon gases, compressed, n.o.s.

Hydrocarbon gases, liquefied, n.o.s.

Hydrocarbon gases mixtures, compressed, n.o.s.

Hydrocarbon gases mixtures, liquefied, n.o.s.

Hydrocarbons, liquid, n.o.s.

Infectious substances, affecting animals

Infectious substances, affecting humans

Insecticide gases, n.o.s.

Insecticide gases, toxic, n.o.s.

Isocyanates, flammable, toxic, n.o.s. *or Isocyanates solutions, flammable, toxic, n.o.s.*

Isocyanates, toxic, flammable, n.o.s. *or Isocyanates solutions, toxic, flammable, n.o.s.*

Liquefied gas, toxic, corrosive, n.o.s.

Liquefied gas, toxic, flammable, corrosive, n.o.s.

Liquefied gas, toxic, oxidizing, corrosive, n.o.s.

Liquefied gas, toxic, oxidizing, n.o.s.

Medicines, liquid, flammable, toxic, n.o.s.

Medicines, liquid, toxic, n.o.s.

Medicine, solid, toxic, n.o.s.

Metal powder, self-heating, n.o.s.

Metal salts of organic compounds, flammable, n.o.s.

Metallic substance, water-reactive, n.o.s.

Metallic substance, water-reactive, self-heating, n.o.s.

Nitriles, flammable, toxic, n.o.s.

Nitriles, toxic, flammable, n.o.s.

Nitriles, toxic, n.o.s.

Organic peroxide type B, liquid

Organic peroxide type B, liquid, temperature controlled

Organic peroxide type B, solid

Organic peroxide type B, solid, temperature controlled

Organic peroxide type C, liquid

Organic peroxide type C, liquid, temperature controlled

Organic peroxide type C, solid

Organic peroxide type C, solid, temperature controlled

Organic peroxide type D, liquid

Organic peroxide type D, liquid, temperature controlled

Organic peroxide type D, solid

Organic peroxide type D, solid, temperature controlled

Organic peroxide type E, liquid

Organic peroxide type E, liquid, temperature controlled

Organic peroxide type E, solid

Organic peroxide type E, solid, temperature controlled

Organic peroxide type F, liquid

Organic peroxide type F, liquid, temperature controlled

Organic peroxide type F, solid

Organic peroxide type F, solid, temperature controlled

Organometallic compound dispersion, water-reactive, flammable, n.o.s.

Organometallic compound solution, water-reactive, flammable, n.o.s.

Organometallic compound, toxic, n.o.s.

Organometallic compound, water reactive, flammable, n.o.s.

Other regulated substances, liquid, n.o.s.

Other regulated substances, solid, n.o.s.

Oxidizing liquid, corrosive, n.o.s.

Oxidizing liquid, n.o.s.

Oxidizing liquid, toxic, n.o.s.

Oxidizing solid, corrosive, n.o.s.

Oxidizing solid, flammable, n.o.s.

Oxidizing solid, n.o.s.

Oxidizing solid, self-heating, n.o.s.

Oxidizing solid, toxic, n.o.s.

Oxidizing solid, water-reactive, n.o.s.

Pesticides, liquid, flammable, toxic, n.o.s.

Pesticides, liquid, toxic, flammable, n.o.s.

Pesticides, liquid, toxic, n.o.s.

Pesticides, solid, toxic, n.o.s.

Propellant, liquid

Propellant, solid

Pyrophoric liquids, organic *or* inorganic, n.o.s.

Pyrophoric metals, n.o.s. *or* Pyrophoric alloys, n.o.s.

Pyrophoric organometallic compound, n.o.s.

Pyrophoric solids, organic *or* inorganic, n.o.s.

Refrigerant gases, n.o.s.

Samples, explosive (*other than initiating explosives*)

Self-heating liquid, corrosive, inorganic, n.o.s.

Self-heating liquid, corrosive, organic, n.o.s.

Self-heating liquid, inorganic, n.o.s.

Self-heating liquid, organic, n.o.s.

Self-heating liquid, toxic, inorganic, n.o.s.

Self-heating liquid, toxic, organic, n.o.s.

Self-heating solid, corrosive, inorganic, n.o.s.

Self-heating solid, corrosive, organic, n.o.s.

Self-heating solid, organic *or* inorganic, n.o.s.

Self-heating solid, oxidizing, n.o.s.

Self-heating solid, toxic, organic *or* inorganic, n.o.s.

Self-reactive liquid type B

Self-reactive liquid type B, temperature controlled

Self-reactive liquid type C

Self-reactive liquid type C, temperature controlled

Self-reactive liquid type D

Self-reactive liquid type D, temperature controlled

Self-reactive liquid type E

Self-reactive liquid type E, temperature controlled

Self-reactive liquid type F
 Self-reactive liquid type F, temperature controlled
 Self-reactive solid type B
 Self-reactive solid type B, temperature controlled
 Self-reactive solid type C
 Self-reactive solid type C, temperature controlled
 Self-reactive solid type D
 Self-reactive solid type D, temperature controlled
 Self-reactive solid type E
 Self-reactive solid type E, temperature controlled
 Self-reactive solid type F
 Self-reactive solid type F, temperature controlled
 Solids containing corrosive liquid, n.o.s.
 Solids containing flammable liquid, n.o.s.
 Solids containing toxic liquid, n.o.s.
 Substances, explosive, n.o.s.
 Substances, explosive, very insensitive (substances, EVI), n.o.s.
 Tear gas substances, liquid *or* solid, n.o.s.
 Toxic liquids, corrosive, organic *or* inorganic, n.o.s.
 Toxic liquids, flammable, organic *or* inorganic, n.o.s.
 Toxic liquids, organic *or* inorganic, n.o.s.
 Toxic liquids, oxidizing, n.o.s.
 Toxic liquids, water-reactive, n.o.s.
 Toxic solids, corrosive, organic *or* inorganic, n.o.s.
 Toxic solids, flammable, organic *or* inorganic, n.o.s.
 Toxic solids, organic *or* inorganic, n.o.s.
 Toxic solids, oxidizing, n.o.s.
 Toxic solids, self-heating, n.o.s.
 Toxic solids, water-reactive, n.o.s.
 Water-reactive, liquid, corrosive, n.o.s.
 Water-reactive, liquid, n.o.s.
 Water-reactive, liquid, toxic, n.o.s.
 Water-reactive, solid, corrosive, n.o.s.
 Water-reactive, solid, flammable, n.o.s.
 Water-reactive, solid, n.o.s.
 Water-reactive, solid, oxidizing, n.o.s.
 Water-reactive, solid, self-heating, n.o.s.
 Water-reactive, solid, toxic, n.o.s.

(4) The provisions of this paragraph do not apply —

(i) To a material that is a hazardous waste and described using the proper shipping name “Hazardous waste, liquid *or* solid, n.o.s.”, classed as a miscellaneous Class 9, provided the EPA hazardous waste number is included on the shipping paper in association with the basic description, or provided the material is described in accordance with the provisions of §172.203(c) of this part.

(ii) To a material for which the hazard class is to be determined by testing under the criteria in §172.101(c)(11).

(iii) If the n.o.s. description for the material (other than a mixture of hazardous materials of different classes meeting the definitions of more than one hazard class) contains the name of the chemical element or group which is primarily responsible for the material being included in the hazard class indicated.

(iv) If the n.o.s. description for the material (which is a mixture of hazardous materials of different classes meeting the definition of more than one hazard class) contains the name of the chemical element or group responsible for the material meeting the definition of one of these classes. In such cases, only the technical name of the component that is not appropriately identified in the n.o.s. description shall be entered in parentheses.

(l) *Marine pollutants.*

(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 appear in parentheses in association with the basic description. 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 basic description.

(2) The words “Marine Pollutant” shall be entered in association with the basic description for each marine pollutant.

(3) Except for transportation by vessel, marine pollutants subject to the provisions of 49 CFR 130.11 are excepted from the requirements of paragraph (l) of this section if a phrase indicating the material is an oilis placed in association with the basic description.

(m) *Poisonous materials.* Notwithstanding the hazard class to which a material is assigned —

(1) If a liquid or solid material in a package meets the definition of a Division 6.1, Packing Group I or II, according to this subchapter, and the fact that it is a poison is not disclosed in the shipping name or class entry, the words “Poison or Toxic” shall be entered on the shipping paper in association with the shipping description.

(2) If the technical name of the compound or principal constituent that causes a material to meet the definition of Division 6.1, Packing Group I or II (as defined in §173.132(a) of this subchapter), or Division 2.3 (as defined in §173.115(c) of this subchapter), is not included in the proper shipping name for the material, the technical name shall be entered on the shipping paper in the manner prescribed in paragraph (k) of this section.

(3) For materials which are poisonous by inhalation (see §171.8 of this subchapter), the words “Poison-Inhalation Hazard” or “Toxic-Inhalation Hazard” and the words “Zone A”, “Zone B”, “Zone C”, or “Zone D”, for gases or “Zone A” or “Zone B” for liquids, as appropriate, shall be entered on the shipping paper immediately following the shipping description. The word “Poison” or “Toxic” need not be repeated if it otherwise appears in the shipping description.

(n) *Elevated temperature materials.* Except for molten sulfur or molten aluminum, if a liquid material in a package meets the definition of an elevated temperature material in §171.8 of this subchapter, and the fact that it is an elevated temperature material is not disclosed in the shipping name, the word “HOT” must immediately precede the proper shipping name of the material on the shipping paper.

(o) *Organic peroxides and self-reactive materials.* The description on a shipping paper for a Division 4.1 (self-reactive) material *or* a Division 5.2 (organic peroxide) material must include the following additional information, as appropriate:

(1) If notification or competent authority approval is required, the shipping paper must contain a statement of approval of the classification and conditions of transport.

(2) For Division 4.1 (self-reactive) and Division 5.2 (organic peroxide) materials that require temperature control during transport, the controland emergency temperature must be included on the shipping paper.

(3) The word “SAMPLE” must be included in association with the basic description when a sample of a Division 4.1 (self-reactive) material (see §173.224(c)(4) of this subchapter) or Division 5.2 (organic peroxide) material (see §173.225(c)(4) of this subchapter) is offered for transportation or transported.

§172.204 Shipper’s certification.

(a) *General.* Except as provided in paragraphs (b) and (c) of this section, each person who offers a hazardous material for transportation shall certify that the material is offered for transportation in accordance with this subchapter by printing (manually or mechanically) on the shipping paper containing the required shipping description the certification contained in paragraph (a)(1) of this section or the certification (declaration) containing the language contained in paragraph (a)(2) of this section.

(1) “This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.” (NOTE: In line one of the certification the words “hereinafter” may be substituted for the words “above-named”).

(2) “I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for the transport according to applicable international and national governmental regulations.”

(b) *Exceptions.*

(1) Except for a hazardous waste, no certification is required for a hazardous material offered for transportation by motor vehicle and transported:

(i) In a cargo tank supplied by the carrier, or

(ii) By the shipper as a private carrier except for a hazardous material that is to be reshipped or transferred from one carrier to another.

(2) No certification is required for the return of an empty tank car which previously contained a hazardous material and which has not been cleaned or purged.

(c) *Transportation by air —*

(1) *General.* Certification containing the following language may be used in place of the certification required by paragraph (a) of this section:

I hereby certify that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked

and labeled, and in proper condition for carriage by air according to applicable national governmental regulations.

(2) *Certificate in duplicate.* Each person who offers a hazardous material to an aircraft operator for transportation by air shall provide two copies of the certification required in this section. (See §175.30 of this subchapter.)

(3) *Passenger and cargo aircraft.* Each person who offers for transportation by air a hazardous material authorized for air transportation shall add to the certification required in this section the following statement:

This shipment is within the limitations prescribed for passenger aircraft/cargo aircraft only (delete nonapplicable).

(4) *Radioactive material.* Each person who offers any radioactive material for transportation aboard a passenger-carrying aircraft shall sign (mechanically or manually) a printed certificate stating that the shipment contains radioactive material intended for use in, or incident to, research, or medical diagnosis or treatment.

(d) *Signature.* The certifications required by paragraph (a) or (c) of this section:

(1) Must be legibly signed by a principal, officer, partner, or employee of the shipper or his agent; and

(2) May be legibly signed manually, by typewriter, or by other mechanical means.

§172.205 Hazardous waste manifest.

(a) No person may offer, transport, transfer, or deliver a hazardous waste (waste) unless an EPA Form 8700-22 and 8700-22A (when necessary) hazardous waste manifest (manifest) is prepared in accordance with 40 CFR 262.20 and is signed, carried, and given as required of that person by this section.

(b) The shipper (generator) shall prepare the manifest in accordance with 40 CFR Part 262.

(c) The original copy of the manifest must be dated by, and bear the handwritten signature of, the person representing:

(1) The shipper (generator) of the waste at the time it is offered for transportation, and

(2) The initial carrier accepting the waste for transportation.

(d) A copy of the manifest must be dated by, and bear the handwritten signature of the person representing:

(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.

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.

§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 a single hazardous material in non-bulk packages.*

A transport vehicle or freight container containing only a single hazardous material in non-bulk packages must be marked, on each side and each end as specified in the §§172.332 or 172.336, with the identification number specified for the hazardous material in the §172.101 Table, subject to the following provisions and limitations:

(i) Each package is marked with the same proper shipping name and identification number;

(ii) The aggregate gross weight of the hazardous material is 4,000 kg (8,820 pounds) or more;

(iii) All of the hazardous material is loaded at one loading facility;

(iv) The transport vehicle or freight container contains no other material, hazardous or otherwise; and

(v) The identification number marking requirement of this paragraph (a)(3) does not apply to Class 1, Class 7, or to non-bulk packagings for which identification numbers are not required.

(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