

§ 173.244

(1) The subsidiary hazard is Class 3 with a flash point greater than 38 °C (100 °F); or

(2) The subsidiary hazard is Division 6.1, Packing Group III; or

(3) The subsidiary hazard is Class 8, Packaging Group, III.

[Amdt. 173–224, 55 FR 52663, Dec. 21, 1990]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 173.243, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.govinfo.gov.

§ 173.244 Bulk packaging for certain pyrophoric liquids (Division 4.2), dangerous when wet (Division 4.3) materials, and poisonous liquids with inhalation hazards (Division 6.1).

When § 172.101 of this subchapter specifies that a hazardous material be packaged under this section, only the following bulk packagings are authorized, subject to the requirements of subparts A and B of part 173 of this subchapter and the special provisions specified in column 7 of the § 172.101 table.

(a) *Rail cars*: (1) Class DOT 105, 109, 112, 114, or 120 fusion-welded tank car tanks; and Class 106 or 110 multi-unit tank car tanks. For tank car tanks built prior to March 16, 2009, the following conditions apply:

(i) Division 6.1 Hazard Zone A materials must be transported in tank cars having a test pressure of 34.47 Bar (500 psig) or greater and conform to Classes 105J, 106 or 110.

(ii) Division 6.1 Hazard Zone B materials must be transported in tank cars having a test pressure of 20.68 Bar (300 psig) or greater and conform to Classes 105S, 106, 110, 112J, 114J or 120S.

(iii) Hydrogen fluoride, anhydrous must be transported in tank cars having a test pressure of 20.68 Bar (300 psig) or greater and conform to Classes 105, 112, 114 or 120.

(2) For materials poisonous by inhalation, until December 31, 2027, single unit tank car tanks built prior to March 16, 2009, and approved by the Tank Car Committee for transportation of the specified material. Except as provided in paragraph (a)(3) of this section, tank cars built on or after March 16, 2009, used for the transportation of the PIH materials listed

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below, must meet the applicable authorized tank car specification listed in the following table:

TABLE 1 TO PARAGRAPH (a)(2)

Proper shipping name	Authorized tank car specification
Acetone cyanohydrin, stabilized (Note 1)	105H500W, 112H500W
Acrolein (Note 1)	105H600W
Allyl Alcohol	105H500W, 112H500W
Bromine	105H500W
Chloropicrin	105H500W, 112H500W
Chlorosulfonic acid	105H500W, 112H500W
Dimethyl sulfate	105H500W, 112H500W
Ethyl chloroformate	105H500W, 112H500W
Hexachlorocyclopentadiene	105H500W, 112H500W
Hydrocyanic acid, aqueous solution or Hydrogen cyanide, aqueous solution <i>with not more than 20% hydrogen cyanide</i> (Note 2)	105H500W, 112H500W
Hydrogen cyanide, stabilized (Note 2)	105H600W
Hydrogen fluoride, anhydrous	105H500W, 112H500W
Poison inhalation hazard, Zone A materials not specifically identified in this table	105H600W
Poison inhalation hazard, Zone B materials not specifically identified in this table	105H500W, 112H500W
Phosphorus trichloride	105H500W, 112H500W
Sulfur trioxide, stabilized	105H500W, 112H500W
Sulfuric acid, fuming	105H500W, 112H500W
Titanium tetrachloride	105H500W, 112H500W

Note 1 to table 1 to paragraph (a)(2): Each tank car must have a reclosing pressure relief device having a start-to-discharge pressure of 10.34 Bar (150 psig). Restenciling to a lower test pressure is not authorized.

Note 2 to table 1 to paragraph (a)(2): Each tank car must have a reclosing pressure relief device having a start-to-discharge pressure of 15.51 Bar (225 psig). Restenciling to a lower test pressure is not authorized.

(3) As an alternative to the authorized tank car specification listed in the table in paragraph (a)(2) of this section, a car of the same authorized tank car specification but of the next lower test pressure, as prescribed in column 5 of the table at § 179.101–1 of this subchapter, may be used provided that both of the following conditions are met:

(i) The difference between the alternative and the required minimum plate thicknesses, based on the calculation prescribed in § 179.100–6 of this subchapter, must be added to the alternative tank car jacket and head shield.

When the jacket and head shield are made from steel with a minimum tensile strength from 70,000 p.s.i. to 80,000 p.s.i., but the required minimum plate thickness calculation is based on steel with a minimum tensile strength of 81,000 p.s.i., the thickness to be added to the jacket and head shield must be increased by a factor of 1.157. Forming allowances for heads are not required to be considered when calculating thickness differences.

(ii) The tank car jacket and head shield are manufactured from carbon steel plate as prescribed in § 179.100-7(a) of this subchapter.

(b) *Cargo tanks*: Specifications MC 330 and MC 331 cargo tank motor vehicles and, except for Division 4.2 materials, MC 312 and DOT 412 cargo tank motor vehicles.

(c) *Portable tanks*: DOT 51 portable tanks and UN portable tanks that meet the requirements of this subchapter, when a T code is specified in Column (7) of the § 172.101 Table of this subchapter for the specific hazardous material, are authorized. Additionally, a DOT 51 or UN portable tank used for Division 6.1 liquids, Hazard Zone A or B, must be certified and stamped to the ASME Code as specified in § 178.273(b)(6) of this subchapter.

[Amdt. 173-224, 55 FR 52663, Dec. 21, 1990, as amended at 56 FR 66275, Dec. 20, 1991; 57 FR 45463, Oct. 1, 1992; Amdt. 173-252, 61 FR 28676, June 5, 1996; 68 FR 45037, July 31, 2003; 72 FR 55693, Oct. 1, 2007; 74 FR 1799, Jan. 13, 2009; 85 FR 75714, Nov. 25, 2020; 87 FR 79779, Dec. 27, 2022]

§ 173.245 Bulk packaging for extremely hazardous materials such as poisonous gases (Division 2.3).

When § 172.101 of this subchapter specifies that a hazardous material be packaged under this section, only the following bulk packagings are authorized, subject to the requirements of subparts A and B of part 173 of this subchapter and the special provisions specified in column 7 of the § 172.101 table.

(a) Tank car tanks and multi-unit tank car tanks, when approved by the Associate Administrator.

(b) Cargo tank motor vehicles and portable tanks, when approved by the Associate Administrator.

[Amdt. 173-224, 55 FR 52663, Dec. 21, 1990, as amended at 56 FR 66275, Dec. 20, 1991; 66 FR 45379, Aug. 28, 2001]

§ 173.247 Bulk packaging for certain elevated temperature materials.

When § 172.101 of this subchapter specifies that a hazardous material be packaged under this section, only the following bulk packagings are authorized, subject to the requirements of subparts A and B of part 173 of this subchapter and the special provisions in column 7 of the § 172.101 table. On or after October 1, 1993, authorized packagings must meet all requirements in paragraph (g) of this section, unless otherwise excepted.

(a) *Rail cars*: Class DOT 103, 104, 105, 109, 111, 112, 114, 115, or 120 tank car tanks; Class DOT 106, 110 multi-unit tank car tanks; AAR Class 203W, 206W, 211W tank car tanks; and non-DOT specification tank car tanks equivalent in structural design and accident damage resistance to specification packagings.

(b) *Cargo tanks*: Specification MC 300, MC 301, MC 302, MC 303, MC 304, MC 305, MC 306, MC 307, MC 310, MC 311, MC 312, MC 330, MC 331 cargo tank motor vehicles; DOT 406, DOT 407, DOT 412 cargo tank motor vehicles; and non-DOT specification cargo tank motor vehicles equivalent in structural design and accident damage resistance to specification packagings. A non-DOT specification cargo tank motor vehicle constructed of carbon steel which is in elevated temperature material service is excepted from § 178.345-7(d)(5) of this subchapter.

(c) *Portable tanks*. DOT Specification 51, 56, 57 and 60 portable tanks; IM 101 and IM 102 portable tanks; UN portable tanks; marine portable tanks conforming to 46 CFR part 64; metal IBCs and non-specification portable tanks equivalent in structural design and accident damage resistance to specification packagings are authorized.

(d) *Crucibles*: Nonspecification crucibles designed and constructed such that the stress in the packaging does