

greater than the normal travel time. The holding time is the elapsed time from loading until venting occurs under equilibrium conditions. The cargo tank must have an outer jacket made of steel when the cargo tank is used to transport a flammable gas.

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Note 15: Specifications MC 330 and MC 331 cargo tanks constructed of other than quenched and tempered steel (NQT) are authorized for all grades of liquefied petroleum gases. Only grades of liquefied petroleum gases determined to be "noncorrosive" are authorized in Specification MC 330 and MC 331 cargo tanks constructed of quenched and tempered steel (QT). "Noncorrosive" means the corrosiveness of the gas does not exceed the limitations for classification 1 of the ASTM Copper Strip Classifications when tested in accordance with ASTM D 1838, "Copper Strip Corrosion by Liquefied Petroleum (LP) Gases" (IBR, see § 171.7 of this subchapter). (For (QT) and (NQT) marking requirements, see § 172.328(c) of this subchapter. For special shipping paper requirements, see § 172.203(h) of this subchapter.)

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(i) * * *

(1) * * *

(i) The total relieving capacity, as determined by the flow formulas contained in Section 5 of CGA S-1.2 (IBR, see § 171.7 of this subchapter), must be sufficient to prevent a maximum pressure in the tank of more than 120 percent of the design pressure;

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(13) A safety relief valve on a chlorine cargo tank must conform to one of the following standards of The Chlorine Institute, Inc.: Type 1 ½ JQ225, Dwg. H51970 (IBR, see § 171.7 of this subchapter); or Type 1 ½ JQ225, Dwg. H50155 (IBR, see § 171.7 of this subchapter).

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(j) * * *

(1) Each container must be constructed in compliance with the requirements in Section VIII of the ASME Code (containers built in compliance with earlier editions starting with 1943 are authorized) and must be marked to indicate compliance in the manner specified by the respective Code.

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(k) A nonspecification cargo tank meeting, and marked in conformance with, the edition of Section VIII of the ASME Code in effect when it was fabricated may be used for the transportation of liquefied petroleum gas provided it meets all of the following conditions:

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(3) It must have been manufactured in conformance with Section VIII of the

ASME Code prior to January 1, 1981, according to its ASME name plate and manufacturer's data report.

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(l) * * *

(5) The analysis method for water content must be as prescribed in CGA G-2.2, "Tentative Standard Method for Determining Minimum of 0.2 percent water in Anhydrous Ammonia," (IBR, see § 171.7 of this subchapter).

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(m) * * *

(1) Has a minimum design pressure of 250 psig and meets the requirements of the edition of Section VIII of the ASME Code in effect at the time it was manufactured and is marked accordingly;

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■ 45. In § 173.318, paragraph (b)(2)(i) introductory text and paragraph (b)(9)(ii) are revised to read as follows:

§ 173.318 Cryogenic liquids in cargo tanks.

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(b) * * *

(2) * * *

(i) *Tanks in oxygen or flammable cryogenic liquid service.* For tanks in oxygen or flammable cryogenic liquid service, the primary system and the secondary system of pressure relief devices must each have a flow capacity equal to or greater than that calculated by the applicable formula in paragraph 5.3.2 or paragraph 5.3.3 of CGA S-1.2 (IBR, see § 171.7 of this subchapter). In addition:

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(9) * * *

(ii) On a vacuum-insulated cargo tank the jacket must be protected by a suitable relief device to release internal pressure. The discharge area of this device must be at least 0.00024 square inch per pound of water capacity of the tank. This relief device must function at a pressure not exceeding the internal design pressure of the jacket, calculated in accordance with Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter), or 25 psig, whichever is less.

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■ 46. In § 173.320, paragraph (c) is revised to read as follows:

§ 173.320 Cryogenic liquids; exceptions.

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(c) For transportation aboard aircraft, see the ICAO Technical Instructions (IBR, see § 171.7 of this subchapter), Packing Instruction 202 and the packaging specifications in part 6, chapter 5.

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■ 47. In § 173.323, the last two sentences in paragraph (b)(3) are revised to read as follows:

§ 173.323 Ethylene oxide.

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(b) * * *

(3) * * * The capacity of relief device and insulation must be such that the charged receptacle will not explode when tested by the method described in CGA Pamphlet C-14 (IBR, see § 171.7 of this subchapter) or other equivalent method. Each completed package must be capable of passing all Packing Group I performance tests.

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■ 48. Section 173.336 is revised to read as follows:

§ 173.336 Nitrogen dioxide, liquefied, or dinitrogen tetroxide, liquefied.

Nitrogen dioxide, liquefied, or dinitrogen tetroxide, liquefied, must be packaged in specification cylinders as prescribed in § 173.192. Specification cylinders prescribed in § 173.192 with valve removed are authorized. Each valve opening must be closed by means of a solid metal plug with tapered thread properly luted to prevent leakage. Transportation in DOT 3AL cylinders is authorized only by highway or rail. Each cylinder must be cleaned in compliance with the requirements of GSA Federal Specification RR-C-901C, paragraphs 3.3.1 and 3.3.2 (IBR, see § 171.7 of this subchapter). Cleaning agents equivalent to those specified in Federal Specification RR-C-901C may be used; however, any cleaning agent must not be capable of reacting with oxygen. One cylinder selected at random from a group of 200 or fewer and cleaned at the same time must be tested for oil contamination in accordance with Federal Specification RR-C-901C, paragraphs 4.4.2.2 and meet the standard of cleanliness specified therein.

■ 49. In § 173.337, paragraph (b) is revised to read as follows:

§ 173.337 Nitric oxide.

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(b) Each cylinder must be cleaned in compliance with the requirements of GSA Federal Specification RR-C-901C, paragraphs 3.3.1 and 3.3.2 (IBR, see § 171.7 of this subchapter). Cleaning agents equivalent to those specified in Federal Specification RR-C-901C may be used; however, any cleaning agent must not be capable of reacting with oxygen. One cylinder selected at random from a group of 200 or fewer and cleaned at the same time must be tested for oil contamination in accordance with Federal Specification