

(a) The gas must be packaged in specification steel cylinders authorized for any compressed gas except acetylene not exceeding 10.5 L (2.8 gallons) internal volume and having a minimum design burst pressure of 19,700 kPa (2,857 psig);

(b) Fittings must be protected against damage under conditions normal incident to transport, any trigger must be fitted with a safety locking pin, and a non-propulsive plug must be installed on the discharge tube; and

(c) Each complete unit must be individually and tightly packed to prevent shifting in wooden boxes (4C1 or 4C2), plywood boxes (4D), reconstituted wood boxes (4F), fiberboard boxes (4G), or plastic boxes, (4H1 and 4H2) of Packing Group II performance level, or in the original manufacturer's transit box.

[Amdt. 173-224, 55 FR 52669, Dec. 21, 1990, as amended at 66 FR 45380, Aug. 28, 2001; 68 FR 61941, Oct. 30, 2003]

§ 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.

[68 FR 75746, Dec. 31, 2003]

§ 173.337 Nitric oxide.

Nitric oxide must be packed in DOT 3A1800, 3AA1800, 3E1800, or 3AL1800 cylinders charged to a pressure of not more than 5,170 kPa (750 psig) at 21 °C (70 °F) and conforming to the requirements in §173.40. Cylinders must be equipped with a stainless steel valve and valve seat that will not deteriorate if in contact with nitric oxide or nitrogen dioxide. Cylinders or valves may not be equipped with pressure relief devices of any type. In addition—

(a) Transportation in DOT 3AL cylinders is authorized only by highway or rail.

(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 RR-C-901C paragraph 4.4.2.2 and meet the standard of cleanliness specified therein.

[67 FR 51651, Aug. 8, 2002, as amended at 68 FR 57633, Oct. 6, 2003; 68 FR 75746, Dec. 31, 2003; 70 FR 34076, June 13, 2005]

§ 173.338 Tungsten hexafluoride.

Tungsten hexafluoride must be packed in specification 3A, 3AA, 3BN, or 3E (§§178.36, 178.37, 178.39, 178.42 of this subchapter) cylinders. Cylinders must be equipped with a valve protection cap or be packed in a strong outside container complying with the provisions of §173.40. Outlets of any valves must be capped or plugged. As an alternative, the cylinder opening may be closed by the use of a metal plug. Specification 3E cylinders must be shipped in an overpack that complies with the provisions of §173.40.

][Amdt. 173-224, 55 FR 52669, Dec. 21, 1990]

§ 173.340 Tear gas devices.

(a) Packagings for tear gas devices must be approved prior to initial transportation by the Associate Administrator.

§ 173.401

(b) Tear gas devices may not be assembled with, or packed in the same packaging with, mechanically- or manually-operated firing, igniting, bursting, or other functioning elements unless of a type and design which has been approved by the Associate Administrator.

(c) Tear gas grenades, tear gas candles, and similar devices must be packaged in one of the following packagings conforming to the requirements of part 178 of this subchapter at the Packing Group II performance level:

(1) In UN 4C1, 4C2, 4D, or 4F metal-strapped wooden boxes. Functioning elements not assembled in grenades or devices must be in a separate compartment of these boxes, or in inner or separate outer boxes, UN 4C1, 4C2, 4D, or 4F, and must be so packed and cushioned that they may not come in contact with each other or with the walls of the box during transportation. Not more than 50 tear gas devices and 50 functioning elements must be packed in one box, and the gross weight of the outer box may not exceed 35 kg (77 pounds).

(2) In a UN 1A2 metal drum. Functioning elements must be packed in a separate inner packaging or compartment. Not more than 24 tear gas devices and 24 functioning elements must be packed in one outer drum, and the gross weight of the drum may not exceed 35 kg (77 pounds).

(3) In a UN 4G fiberboard box with inside tear gas devices meeting Specifications 2P or 2Q. Each inside packaging must be placed in fiberboard tubes fitted with metal ends or a fiber box with suitable padding. Not more than 30 inner packagings must be packed in one outer box, and the gross weight of the outer box may not exceed 16 kg (35 pounds).

(4) In other packagings of a type or design which has been approved by the Associate Administrator.

(d) Tear gas devices may be shipped completely assembled when offered by or consigned to the U.S. Department of Defense, provided the functioning elements are so packed that they cannot accidentally function. Outer pack-

49 CFR Ch. I (10–1–05 Edition)

agings must be UN 4C1, 4C2, 4D, or 4F metal-strapped wooden boxes.

[Amdt. 173–224, 55 FR 52669, Dec. 21, 1990, as amended 66 FR 45379, Aug. 28, 2001]

Subpart H [Reserved]

Subpart I—Class 7 (Radioactive) Materials

SOURCE: Amdt. 173–244, 60 FR 50307, Sept. 28, 1995, unless otherwise noted.

§ 173.401 Scope.

(a) This subpart sets forth requirements for the packaging and transportation of Class 7 (radioactive) materials by offerors and carriers subject to this subchapter. The requirements prescribed in this subpart are in addition to, not in place of, other requirements set forth in this subchapter for Class 7 (radioactive) materials and those of the Nuclear Regulatory Commission in 10 CFR part 71.

(b) This subpart does not apply to:

(1) Class 7 (radioactive) materials produced, used, transported, or stored within an establishment other than during the course of transportation, including storage in transportation.

(2) Class 7 (radioactive) materials that have been implanted or incorporated into, and are still in, a person or live animal for diagnosis or treatment.

(3) Class 7 (radioactive) material that is an integral part of the means of transport.

(4) Natural material and ores containing naturally occurring radionuclides which are not intended to be processed for use of these radionuclides, provided the activity concentration of the material does not exceed 10 times the values specified in § 173.436.

[Amdt. 173–244, 60 FR 50307, Sept. 28, 1995, as amended at 69 FR 3670, Jan. 26, 2004]

§ 173.403 Definitions.

For purposes of this subpart—

*A*₁ means the maximum activity of special form Class 7 (radioactive) material permitted in a Type A package. This value is either listed in § 173.435 or may be derived in accordance with the procedures prescribed in § 173.433.