

<sup>6</sup> See AAR specifications for tank cars, Appendix E, E4.01 and § 179.103-2.

<sup>7</sup> When the use of nickel is required by the lading, the thickness shall not be less than two inches.

[Amdt. 179-52, 61 FR 28679, June 5, 1996 as amended at 66 FR 45390, Aug. 28, 2001]

**§ 179.102 Special commodity requirements for pressure tank car tanks.**

(a) In addition to §§ 179.100 and 179.101 the following requirements are applicable:

(b) [Reserved]

**§ 179.102-1 Carbon dioxide, refrigerated liquid.**

(a) Tank cars used to transport carbon dioxide, refrigerated liquid must comply with the following special requirements:

(1) All plates for tank, manway nozzle and anchorage of tanks must be made of carbon steel complying with ASTM Specification A 516, Grades 55, 60, 65, or 70, or AAR Specification TC128-78, Grade B. The ASTM A516 plate must also meet the Charpy V-Notch test requirements of ASTM A20-79b (see table 16) in the longitudinal direction of rolling. The TC128 plate must also meet the Charpy V-Notch energy absorption requirements of 15 ft.-lb minimum average for 3 specimens and 10 ft.-lb minimum for one specimen at minus 50 °F in the longitudinal direction of rolling in accord with ASTM Specification A 370. Production-welded test plates prepared as required by W4.00 of AAR Specifications for Tank Cars, appendix W, must include impact test specimens of weld metal and heat-affected zone. As an alternate, anchor legs may be fabricated of stainless steel, ASTM A 240/A 240M (incorporated by reference; see § 171.7 of this subchapter) Types 304, 304L, 316 or 316L for which impact tests are not required.

(2)-(6) [Reserved]

(b) [Reserved]

[29 FR 18995, Dec. 29, 1964. Redesignated at 32 FR 5606, Apr. 5, 1967, and amended by Amdt. 179-10, 36 FR 21347, Nov. 6, 1971; Amdt. 179-28, 46 FR 49906, Oct. 8, 1981; 46 FR 55266, Nov. 9, 1981; Amdt. 179-32, 48 FR 50440, 50441, Nov. 1, 1983; 49 FR 42736, Oct. 24, 1984; Amdt. 179-45, 55 FR 52728, Dec. 21, 1990; Amdt. 179-52, 61 FR 28680, June 5, 1996; 67 FR 51660, Aug. 8, 2002]

**§ 179.102-2 Chlorine.**

(a) Each tank car used to transport chlorine must comply with all of the following:

(1) Tanks must be fabricated from carbon steel complying with ASTM Specification A 516, Grade 70, or AAR Specification TC-128, Grade A or B.

(2)-(3) [Reserved]

(b) [Reserved]

[Amdt. 179-7, 36 FR 14697, Aug. 10, 1971; Amdt. 179-10, 36 FR 21346, Nov. 6, 1971, as amended by Amdt. 179-25, 44 FR 20433, Apr. 5, 1979; Amdt. 179-40, 52 FR 13046, Apr. 20, 1987; Amdt. 179-45, 55 FR 52728, Dec. 21, 1990; Amdt. 179-52, 61 FR 28680, June 5, 1996]

**§ 179.102-4 Vinyl fluoride, inhibited.**

Each tank used to transport vinyl fluoride, stabilized, must comply with the following special requirements:

(a) All plates for the tank must be fabricated of material listed in paragraph (a)(2) of this section, and appurtenances must be fabricated of material listed in paragraph (a)(1) or (a)(2) of this section.

(1) Stainless steel, ASTM A 240/A 240M (incorporated by reference; see § 171.7 of this subchapter), Type 304, 304L, 316 or 316L, in which case impact tests are not required; or

(2) Steel complying with ASTM Specification A516; Grade 70; ASTM Specification A537, Class 1; or AAR Specification TC128, Grade B, in which case impact tests must be performed as follows:

(i) ASTM Specification A516 and A537 material must meet the Charpy V-notch test requirements, in longitudinal direction of rolling, of ASTM Specification A20.

(ii) AAR Specification TC128 material must meet the Charpy V-notch test requirements, in longitudinal direction of rolling, of 15 ft.-lb. minimum average for 3 specimens, with a 10 ft.-lb. minimum for any one specimen, at minus 50 °F. or colder, in accordance with ASTM Specification A 370.