

paragraph (b) of this section, shipments of ORM-D materials are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, a hazardous waste, or a marine pollutant or unless offered or intended for transportation by aircraft, and are eligible for the exceptions provided in §173.156.

(d) *Materials corrosive to aluminum or steel only.* Except for a hazardous substance, a hazardous waste, or a marine pollutant, a material classed as a Class 8, Packing Group III, material solely because of its corrosive effect—

(1) On aluminum is not subject to any other requirements of this subchapter when transported by motor vehicle or rail car in a packaging constructed of materials that will not react dangerously with or be degraded by the corrosive material; or

(2) On steel is not subject to any other requirements of this subchapter when transported by motor vehicle or rail car in a bulk packaging constructed of materials that will not react dangerously with or be degraded by the corrosive material.

[Amdt. 173-224, 55 FR 52634, Dec. 21, 1990, as amended at 56 FR 66270, Dec. 20, 1991; 57 FR 45463, Oct. 1, 1992; Amdt. 173-231, 57 FR 52940, Nov. 5, 1992]

§173.155 Exceptions for Class 9 (miscellaneous hazardous materials).

(a) *General.* Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the §172.101 table of this subchapter.

(b) *Limited quantities.* Limited quantities of miscellaneous hazardous materials (Class 9) are excepted from labeling, unless offered or intended for transportation by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. In addition, shipments of these limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds)

gross weight. The following combination packagings are authorized:

(1) For liquids, inner packagings not over 5.0 L (1.3 gallons) net capacity each, packed in strong outer packagings.

(2) For solids, inner packagings not over 5.0 kg (11 pounds) net capacity each, packed in strong outer packagings.

(c) *Consumer commodities.* A limited quantity which conforms to the provisions of paragraph (b) of this section and is a “consumer commodity” as defined in §171.8 of this subchapter, may be renamed “Consumer commodity” and reclassified as ORM-D material. In addition to the exceptions provided by paragraph (b) of this section, shipments of ORM-D materials are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, a hazardous waste, or a marine pollutant or unless offered for transportation or transported by aircraft, and are eligible for the exceptions provided in §173.156.

[Amdt. 173-224, 55 FR 52634, Dec. 21, 1990, as amended at 56 FR 66270, Dec. 20, 1991; Amdt. 173-231, 57 FR 52940, Nov. 5, 1992; Amdt. 173-253, 61 FR 27174, May 30, 1996]

§173.156 Exceptions for ORM materials.

(a) Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the §172.101 table or in a packaging section in this part.

(b) *ORM-D.* Packagings for ORM-D materials are specified according to hazard class in §§173.150 through 173.155 and in §173.306. In addition to other exceptions specified for ORM-D materials in this part:

(1) Strong outer packagings as specified in this part, marking requirements specified in subpart D of part 172 of this subchapter, and the 30 kg (66 pounds) gross weight limitation are not required for materials classed as ORM-D when—

(i) Unitized in cages, carts, boxes or similar overpacks;

(ii) Offered for transportation or transported by:

§ 173.158

- (A) Rail;
 - (B) Private or contract motor carrier; or
 - (C) Common carrier in a vehicle under exclusive use for such service; and
 - (iii) Transported to or from a manufacturer, a distribution center, or a retail outlet, or transported to a disposal facility from one offeror.
- (2) The 30 kg (66 pounds) gross weight limitation does not apply to materials classed as ORM-D when offered for transportation, or transported, by highway or rail between a manufacturer, a distribution center, and a retail outlet provided—

- (i) Inner packagings conform to the quantity limits for inner packagings specified in §§173.150(b), 173.152(b), 173.154(b), 173.155(b) and 173.306 (a) and (b), as appropriate;
- (ii) The inner packagings are packed into corrugated fiberboard trays to prevent them from moving freely;
- (iii) The trays are placed in a fiberboard box which is banded and secured to a wooden pallet by metal, fabric, or plastic straps, to form a single palletized unit;
- (iv) The package conforms to the general packaging requirements of subpart B of this part;
- (v) The maximum net quantity of hazardous material permitted on one palletized unit is 250 kg (550 pounds); and
- (vi) The package is properly marked in accordance with §172.316 of this subchapter.

[Amdt. 173-224, 55 FR 52634, Dec. 21, 1990, as amended at 56 FR 66270, Dec. 20, 1991; 57 FR 45463, Oct. 1, 1992; Amdt. 173-255, 61 FR 50626, Sept. 26, 1996; 63 FR 37461, July 10, 1998]

Subpart E—Non-bulk Packaging for Hazardous Materials Other Than Class 1 and Class 7

SOURCE: Amdt. 173-224, 55 FR 52643, Dec. 21, 1990, unless otherwise noted.

§ 173.158 Nitric acid.

- (a) Nitric acid exceeding 40 percent concentration may not be packaged with any other material.
- (b) Nitric acid in any concentration which does not contain sulfuric acid or hydrochloric acid as impurities, when

49 CFR Ch. I (10-1-01 Edition)

offered for transportation or transported by rail, highway, or water shall be packaged in specification containers as follows:

- (1) 1A1 stainless steel drums are authorized, subject to the following limitations:
 - (i) Stainless steel used in drums must conform to the following thicknesses:

Nominal (marked) capacity (in liters) of 1A1 drum	Minimum thickness (in mm) of stainless steel
55	0.9
115	1.2
210	1.5
450	2.0

- (ii) Drums weighing less than 85 percent of their original tare weight may not be used.
- (iii) Type 304 or other grades of equivalent corrosion-resistant steels in the as-welded condition are permissible for nitric acid concentrations up to and including 78 percent.
- (iv) For all concentrations of nitric acid, the following are permissible:
 - (A) Type 304 heat-treated (quenched in water at 1040 °C (1900 °F)),
 - (B) Stabilized Type 347 in the as-welded condition,
 - (C) Stabilized Type 347 stress-relieved (845-900 °C (1550-1650 °F)),
 - (D) Stabilized Type 347 heat-treated (quenched in water at 1040 °C (1900 °F)), or
 - (E) Other grades of equivalent corrosion resistance.

(v) All parts of drum exposed to lading must be capable of withstanding the corrosive effect of nitric acid to the extent that 65 percent boiling nitric acid does not penetrate the metal more than 0.0381 mm (0.002 inches) per month. (ASTM A 262-68 may be used for a suitable corrosion test procedure.)

(vi) In addition to marking required by §178.503 of this subchapter, the following marks, in lettering of at least 12.7 mm (0.5 inch) height, must be placed on drums used to transport nitric acid:

- (A) The type of steel used in body and head sheets as identified by American Iron and Steel Institute type number, and, in addition, the letters "HT" following the steel designation on containers subject to stress relieving or heat treatment during manufacture.