- (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; 68 FR 45033, July 31, 2003; 69 FR 76157, Dec. 20, 2004; 71 FR 14603, Mar. 22, 2006; 72 FR 55693, Oct. 1, 2007; 76 FR 3374, Jan. 19, 2011; 78 FR 1114, Jan. 7, 2013]

# § 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 of Class 9 materials. Limited quantities of miscellaneous hazardous materials in Packing Groups II and III are excepted from labeling requirements, unless the material is offered for transportation or transported by aircraft, and are excepted from the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. Unless otherwise specified in paragraph (c) of this section, packages of limited quantities intended for transportation by aircraft must conform to the applicable requirements (e.g., authorized materials, inner packaging quantity limits and closure securement) of §173.27 of this part. A limited quantity package that conforms to the provisions of this section is 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, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft or vessel, and is eligible for the exceptions provided in

- §173.156 of this part. In addition, packages of 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. Except for transportation by aircraft, the following combination packagings are authorized:
- (1) For miscellaneous materials in Packing Group II, inner packagings not over 1.0 L (0.3 gallon) net capacity each for liquids or not over 1.0 kg (2.2 pounds) net capacity each for solids, packed in a strong outer packaging.
- (2) For miscellaneous materials in Packing Group III, inner packagings not over 5.0 L (1.3 gallons) net capacity each for liquids or not over 5.0 kg (11 lbs) net capacity each for solids, packed in a strong outer packaging.
- (c) Consumer commodities. Until December 31, 2020, a limited quantity package containing a "consumer commodity" as defined in §171.8 of this subchapter, may be renamed "Consumer commodity" and reclassed as ORM-Dor, until December 31, 2012, as ORM-D-AIR material and offered for transportation and transported in accordance with the applicable provisions of this subchapter in effect on October 1, 2010.

[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; 71 FR 14603, Mar. 22, 2006; 76 FR 3375, Jan. 19, 2011; 78 FR 1114, Jan. 7, 2013]

## § 173.156 Exceptions for limited quantity and ORM.

- (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) Packagings for limited quantity and ORM-D are specified according to hazard class in §§173.150 through 173.155, 173.306 and 173.309(b). In addition to exceptions provided for limited quantity and ORM-D materials elsewhere in this part, the following are provided:
- (1) Strong outer packagings as specified in this part, marking requirements specified in subpart D of part 172 of this

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subchapter, and the 30 kg (66 pounds) gross weight limitation when—

- (i) Unitized in cages, carts, boxes or similar overpacks;
- (ii) Offered for transportation or transported by:
  - (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 packages of limited quantity materials marked in accordance with §172.315 of this subchapter, or, until December 31, 2020, materials classed and marked as ORM-D and described as a Consumer commodity, as defined in §171.8 of this subchapter, 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), 173.306 (a) and (b), and 173.309(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

[78 FR 1114, Jan. 7, 2013, as amended at 78 FR 65481, Oct. 31, 2013]

### 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 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  $^{\circ}$ C (1900  $^{\circ}$ F)),
- (B) Stabilized Type 347 in the aswelded condition.
- (C) Stabilized Type 347 stress-relieved  $(845-900 \, ^{\circ}\text{C} \, (1550-1650 \, ^{\circ}\text{F}))$ .
- (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 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: