- (iii) The Division 4.2 material may not exceed 2 kg (4.4 pounds) net weight per inner packaging and may not exceed 10 kg (22 pounds) net weight per outer packaging;
- (iv) The Division 5.1 materials may not exceed 2 kg (4.4 pounds) net weight per inner packaging and may not exceed 10 kg (22 pounds) net weight per outer packaging. The aggregate net weight per freight container, unit load device, transport vehicle, or rail car may not exceed 100 kg (220 pounds);
- (v) The Division 5.2 material may not exceed 1 kg (2.2 pounds) net weight per inner packaging and may not exceed 5 kg (11 pounds) net weight per outer packaging. Organic Peroxide, Type B material may not exceed 0.5 kg (1.1 pounds) net weight per inner packaging and may not exceed 2.5 kg (5.5 pounds) net weight per outer packaging. The aggregate net weight per freight container, unit load device, transport vehicle, or rail car may not exceed 50 kg (110 pounds).
- (f) Additional exceptions. Lab packs conforming to the requirements of this section are not subject to the following:
- (1) The overpack marking and labeling requirements in §173.25(a)(2) of this subchapter when secured to a pallet with shrink-wrap or stretch-wrap except that labels representative of each Hazard Class or Division in the overpack must be visibly displayed on two opposing sides.
- (2) The restrictions for overpacks containing Class 8, Packing Group I material and Division 5.1, Packing Group I material in §173.25(a)(5) of this subchapter. These waste materials may be overpacked with other materials.
- (g) Household waste. Household waste, as defined in §171.8 of this subchapter, is not subject to the requirements of this subchapter when transported in accordance with applicable state, local, or tribal requirements.

[Amdt. 173–224, 55 FR 52609, Dec. 21, 1990, as amended at 56 FR 66265, Dec. 20, 1991; Amdt. 173–231, 57 FR 52939, Nov. 5, 1992; Amdt. 173–138, 59 FR 49133, Sept. 26, 1994; 65 FR 50460, Aug. 18, 2000; 65 FR 58629, Sept. 29, 2000; 68 FR 48569, Aug. 14, 2003; 70 FR 3309, Jan. 24, 2005; 73 FR 4717, Jan. 28, 2008; 74 FR 2255, Jan. 14, 2009; 75 FR 27214, May 14, 2010; 76 FR 56315, Sept. 13, 2011]

§ 173.13 Exceptions for Class 3, Divisions 4.1, 4.2, 4.3, 5.1, 6.1, and Classes 8 and 9 materials.

- (a) A Class 3, 8 or 9, or Division 4.1, 4.2, 4.3, 5.1, or 6.1 material is excepted from the labeling (except for the CARGO AIRCRAFT ONLY label), placarding and segregation requirements of this subchapter if prepared for transportation in accordance with the requirements of this section. A material that meets the definition of a material poisonous by inhalation may not be offered for transportation or transported under provisions of this section.
- (b) A hazardous material conforming to the requirements of this section may be transported by motor vehicle and rail car. In addition, packages prepared in accordance with this section may be transported by aircraft under the following conditions:
- (1) Cargo-only aircraft. Only hazardous materials permitted to be transported aboard either a passenger or cargo-only aircraft by column (9A) or (9B) of the Hazardous Materials Table in §172.101 of this subchapter are authorized aboard cargo-only aircraft.
- (2) Passenger carrying aircraft. Only hazardous materials permitted to be transported aboard a passenger aircraft by column (9A) of the Hazardous Materials Table in §172.101 of this subchapter are authorized aboard passenger aircraft. The completed package, assembled as for transportation, must be successfully tested in accordance with part 178 of this subchapter at the Packing Group I level. A hazardous material which meets the definition of a Division 5.1 (oxidizer) at the Packing Group I level in accordance with §173.127(b)(1)(i) of this subchapter may not be transported aboard a passenger aircraft.
- (3) Packages offered for transportation aboard either passenger or cargo-only aircraft must meet the requirements for transportation by aircraft specified in §173.27 of this subchapter.
- (c) A hazardous material permitted by paragraph (a) of this section must be packaged as follows:
 - (1) For liquids:
- (i) The hazardous material must be placed in a tightly closed glass, plastic

§ 173.21

or metal inner packaging with a maximum capacity not exceeding 1.2 L. Sufficient outage must be provided such that the inner packaging will not become liquid full at 55 °C (130 °F). The net quantity (measured at 20 °C (68 °F)) of liquid in any inner packaging may not exceed 1 L. For transportation by aircraft, the net quantity in one package may not exceed the quantity specified in columns (9A) or (9B), as appropriate.

- (ii) The inner packaging must be placed in a hermetically sealed barrier bag which is impervious to the lading, and then wrapped in a non-reactive absorbent material in sufficient quantity to completely absorb the contents of the inner packaging. Alternatively, the inner packaging may first be wrapped in a non-reactive absorbent material and then placed in the hermetically sealed barrier bag. The combination of inner packaging, absorbent material, and bag must be placed in a snugly fitting metal can.
- (iii) The metal can must be securely closed. For liquids that are in Division 4.2 or 4.3, the metal can must be hermetically sealed. For Division 4.2 materials in Packing Group I, the metal can must be tested in accordance with part 178 of this subchapter at the Packing Group I performance level.
- (iv) The metal can must be placed in a fiberboard box that is placed in a hermetically sealed barrier bag which is impervious to the lading.
- (v) The intermediate packaging must be placed inside a securely closed, outer packaging conforming to §173.201.
- (vi) Not more than four intermediate packagings are permitted in an outer packaging.
 - (2) For solids:
- (i) The hazardous material must be placed in a tightly closed glass, plastic or metal inner packaging. The net quantity of material in any inner packaging may not exceed 2.85kg (6.25 pounds). For transportation by aircraft, the net quantity in one package may not exceed the quantity specified in columns (9A) or (9B), as appropriate.
- (ii) The inner packaging must be placed in a hermetically sealed barrier bag which is impervious to the lading.

- (iii) The barrier bag and its contents must be placed in a fiberboard box that is placed in a hermetically-sealed barrier bag which is impervious to the lading.
- (iv) The intermediate packaging must be placed inside an outer packaging conforming to §173.211.
- (v) Not more than four intermediate packagings are permitted in an outer packaging.
- (d) The outside of the package must be marked, in association with the proper shipping name, with the statement: "This package conforms to 49 CFR 173.13."

[Amdt. 173–253, 61 FR 27173, May 30, 1996, as amended at 65 FR 50460, Aug. 18, 2000; 66 FR 45381, Aug. 28, 2001; 70 FR 3309, Jan. 24, 2005; 71 FR 54395, Sept. 14, 2006; 75 FR 27215, May 14, 2010]

Subpart B—Preparation of Hazardous Materials for Transportation

§ 173.21 Forbidden materials and packages.

Unless otherwise provided in this subchapter, the offering for transportation or transportation of the following is forbidden:

- (a) Materials that are designated "Forbidden" in Column 3 of the §172.101 table.
- (b) Forbidden explosives as defined in §173.54 of this part.
- (c) Electrical devices, such as batteries and battery-powered devices, which are likely to create sparks or generate a dangerous evolution of heat, unless packaged in a manner which precludes such an occurrence.
- (d) For carriage by aircraft, any package which has a magnetic field of more than 0.00525 gauss measured at 4.5 m (15 feet) from any surface of the package.
- (e) A material in the same packaging, freight container, or overpack with another material, the mixing of which is likely to cause a dangerous evolution of heat, or flammable or poisonous gases or vapors, or to produce corrosive materials.
- (f) A package containing a material which is likely to decompose with a self-accelerated decomposition temperature (SADT) of 50 $^{\circ}$ C (122 $^{\circ}$ F) or