§ 173.4 Small quantities for highway and rail.

(a) When transported domestically by highway or rail in conformance with this section, small quantities of Class 3, Division 4.1, Division 4.2 (PG II and III), Division 4.3 (PG II and III), Division 5.1, Division 5.2, Division 6.1, Class 7, Class 8, and Class 9 materials that also meet the definition of one or more of these hazard classes, are not subject to any other requirements of this subchapter when—

(i) Thirty (30) mL (1 ounce) for authorized liquids, other than Division 6.1, Packing Group I, Hazard Zone A or B materials;

(ii) Thirty (30) g (1 ounce) for authorized solid materials;

(iii) One (1) g (0.04 ounce) for authorized materials meeting the definition of a Division 6.1, Packing Group I, Hazard Zone A or B material; and

(iv) An activity level not exceeding that specified in §§ 173.421, 173.424, 173.425 or 173.426, as appropriate, for a package containing a Class 7 (radioactive) material.

(b) Each inner receptacle:

(i) Is not liquid-full at 55 °C (131 °F), and

(ii) Is constructed of plastic having a minimum thickness of no less than 0.2 mm (0.008 inch), or earthenware, glass, or metal;

(c) Each inner receptacle with a removable closure has its closure held securely in place with wire, tape, or other positive means;

(d) Unless equivalent cushioning and absorbent material surrounds the inside packaging, each inner receptacle is securely packed in an inside packaging with cushioning and absorbent material that:

(i) Will not react chemically with the material, and

(ii) Is capable of absorbing the entire contents (if a liquid) of the receptacle;

(e) The inside packaging is securely packed in a strong outer packaging;

(f) The completed package, as demonstrated by prototype testing, is capable of sustaining—

(i) Each of the following free drops made from a height of 1.8 m (5.9 feet) directly onto a solid unyielding surface without breakage or leakage from any
inner receptacle and without a substantial reduction in the effectiveness of the package:

(A) One drop flat on bottom;
(B) One drop flat on top;
(C) One drop flat on the long side;
(D) One drop flat on the short side; and
(E) One drop on a corner at the junction of three intersecting edges; and

(ii) A compressive load as specified in §178.606(c) of this subchapter.

NOTE TO PARAGRAPH (a)(6): Each of the tests in paragraph (a)(6) of this section may be performed on a different but identical package; i.e., all tests need not be performed on the same package.

(7) Placement of the material in the package or packing different materials in the package does not result in a violation of §173.21;

(8) The gross mass of the completed package does not exceed 29 kg (64 pounds);

(9) The package is not opened or otherwise altered until it is no longer in commerce; and

(10) The shipper certifies conformance with this section by marking the outside of the package with the statement "This package conforms to 49 CFR 173.4 for domestic highway or rail transport only."

(b) A package containing a Class 7 (radioactive) material also must conform to the requirements of this subchapter

(a) Each of the tests in paragraph (a)(6) of this section may be performed on a different but identical package; i.e., all tests need not be performed on the same package.

(7) Placement of the material in the package or packing different materials in the package does not result in a violation of §173.21;

(8) The gross mass of the completed package does not exceed 29 kg (64 pounds);

(9) The package is not opened or otherwise altered until it is no longer in commerce; and

(10) The shipper certifies conformance with this section by marking the outside of the package with the statement "This package conforms to 49 CFR 173.4 for domestic highway or rail transport only."

(b) A package containing a Class 7 (radioactive) material also must conform to the requirements of this subchapter

(c) Inner packaging limits. The maximum quantity of hazardous materials in each inner packaging is limited to:

(1) For toxic material with a Division 6.1 primary or subsidiary hazard, PG I or II—
   (i) 1 g (0.04 ounce) for solids; or
   (ii) 1 mL (0.03 ounce) for liquids;
   (2) 30 g (1 ounce) or 30 mL (1 ounce) for solids or liquids other than those covered in paragraph (c)(1) of this section; and
   (3) For gases a water capacity of 30 mL (1.8 cubic inches) or less.

(d) Outer packaging aggregate quantity limits. The maximum aggregate quantity of hazardous materials contained in each outer packaging must not exceed the limits provided in the following paragraphs. For outer packagings containing more than one hazardous material, the aggregate quantity of hazardous material must not exceed the lowest permitted maximum aggregate quantity. The limits are as follows:

(1) The shipper's responsibilities to properly class their material in accordance with §173.22 of this subchapter;
(2) Sections 171.15 and 171.16 of this subchapter pertaining to the reporting of incidents; and
(3) For a Class 7 (Radioactive) material the requirements for an excepted package.

(b) Authorized materials. Only materials authorized for transport aboard passenger aircraft and appropriately classed within one of the following hazardous classes or divisions may be transported in accordance with this section:

(1) Division 2.2 materials with no subsidiary hazard;
(2) Class 3 materials;
(3) Class 4 (PG II and III) materials except for self-reactive materials;
(4) Division 5.1 (PG II and III);
(5) Division 5.2 materials only when contained in a chemical kit or a first aid kit;
(6) Division 6.1, other than PG I, Hazard Zone A or B material;
(7) Class 7, Radioactive material in excepted packages

8(b) Class 8 (PG II and III), except for UN2803 (Gallium) and UN2809 (Mercury); and
(9) Class 9, except for UN1845 (Carbon dioxide, solid or Dry ice), and lithium batteries and cells.

(c) Inner packaging limits. The maximum quantity of hazardous materials in each inner packaging is limited to:

(1) For toxic material with a Division 6.1 primary or subsidiary hazard, PG I or II—
   (i) 1 g (0.04 ounce) for solids; or
   (ii) 1 mL (0.03 ounce) for liquids;
   (2) 30 g (1 ounce) or 30 mL (1 ounce) for solids or liquids other than those covered in paragraph (c)(1) of this section; and
   (3) For gases a water capacity of 30 mL (1.8 cubic inches) or less.

(d) Outer packaging aggregate quantity limits. The maximum aggregate quantity of hazardous materials contained in each outer packaging must not exceed the limits provided in the following paragraphs. For outer packagings containing more than one hazardous material, the aggregate quantity of hazardous material must not exceed the lowest permitted maximum aggregate quantity. The limits are as follows:

(1) The shipper's responsibilities to properly class their material in accordance with §173.22 of this subchapter;
(2) Sections 171.15 and 171.16 of this subchapter pertaining to the reporting of incidents; and
(3) For a Class 7 (Radioactive) material the requirements for an excepted package.

(b) Authorized materials. Only materials authorized for transport aboard passenger aircraft and appropriately classed within one of the following hazardous classes or divisions may be transported in accordance with this section:

(1) Division 2.2 materials with no subsidiary hazard;
(2) Class 3 materials;
(3) Class 4 (PG II and III) materials except for self-reactive materials;
(4) Division 5.1 (PG II and III);
(5) Division 5.2 materials only when contained in a chemical kit or a first aid kit;
(6) Division 6.1, other than PG I, Hazard Zone A or B material;
(7) Class 7, Radioactive material in excepted packages

8(b) Class 8 (PG II and III), except for UN2803 (Gallium) and UN2809 (Mercury); and
(9) Class 9, except for UN1845 (Carbon dioxide, solid or Dry ice), and lithium batteries and cells.

(c) Inner packaging limits. The maximum quantity of hazardous materials in each inner packaging is limited to:

(1) For toxic material with a Division 6.1 primary or subsidiary hazard, PG I or II—
   (i) 1 g (0.04 ounce) for solids; or
   (ii) 1 mL (0.03 ounce) for liquids;
   (2) 30 g (1 ounce) or 30 mL (1 ounce) for solids or liquids other than those covered in paragraph (c)(1) of this section; and
   (3) For gases a water capacity of 30 mL (1.8 cubic inches) or less.

(d) Outer packaging aggregate quantity limits. The maximum aggregate quantity of hazardous materials contained in each outer packaging must not exceed the limits provided in the following paragraphs. For outer packagings containing more than one hazardous material, the aggregate quantity of hazardous material must not exceed the lowest permitted maximum aggregate quantity. The limits are as follows: