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## **Title 49: Transportation**

### [PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS](#)

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#### **§ 173.4 Small quantities for highway and rail.**

(a) When transported domestically by highway or rail in conformance with this section, quantities of Division 2.2 (except aerosols with no subsidiary hazard), 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 are not subject to any other requirements when—

(1) The maximum quantity of material per inner receptacle or article is limited to—

(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.

(v) Thirty (30) mL water capacity (1.8 cubic inches) for authorized Division 2.2 materials.

(2) With the exception of temperature sensing devices, 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;

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

(4) 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;

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

(6) 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 §173.421(a)(1) through (a)(5) or §173.424(a) through (g), as appropriate.
- (c) Packages which contain a Class 2 (other than those authorized in paragraph (a) of this section), Division 4.2 (PG I), or Division 4.3 (PG I) material conforming to paragraphs (a)(1) through (10) of this section may be offered for transportation or transported if approved by the Associate Administrator.
- (d) Lithium batteries and cells are not eligible for the exceptions provided in this section.

74 FR 2253, Jan. 14, 2009, as amended at 75 FR 5393, Feb. 2, 2010; 76 FR 3368, Jan. 19, 2011]

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