

## § 178.819

wall of a wide face, is made at a 45° angle to the principal axis of the IBC, halfway between the bottom surface and the top level of the contents. The IBC must then be subjected to a uniformly distributed superimposed load equivalent to twice the maximum net mass. The load must be applied for at least five minutes. An IBC which is designed to be lifted from the top or the side must, after removal of the superimposed load, be lifted clear of the floor and maintained in that position for a period of five minutes.

(d) *Criterion for passing the test.* The IBC passes the tear test if the cut does not propagate more than 25 percent of its original length.

[Amdt. 178-103, 59 FR 38074, July 26, 1994, as amended at 66 FR 45386, Aug. 28, 2001]

## § 178.819 Vibration test.

(a) *General.* The vibration test must be conducted for the qualification of all rigid IBC design types. Flexible IBC design types must be capable of withstanding the vibration test.

(b) *Test method.* (1) A sample IBC, selected at random, must be filled and closed as for shipment. IBCs intended for liquids may be tested using water as the filling material for the vibration test.

(2) The sample IBC must be placed on a vibrating platform with a vertical or rotary double-amplitude (peak-to-peak displacement) of one inch. The IBC must be constrained horizontally to prevent it from falling off the platform, but must be left free to move vertically and bounce.

(3) The test must be performed for one hour at a frequency that causes the package to be raised from the vibrating platform to such a degree that a piece of material of approximately 1.6-mm (0.063-inch) thickness (such as steel strapping or paperboard) can be passed between the bottom of the IBC and the platform. Other methods at least equally effective may be used (see § 178.801(i)).

## 49 CFR Ch. I (10-1-12 Edition)

(c) *Criteria for passing the test.* An IBC passes the vibration test if there is no rupture or leakage.

[Amdt. 178-103, 59 FR 38074, July 26, 1994, as amended by Amdt. 178-108, 60 FR 40038, Aug. 4, 1995; Amdt. 178-110, 60 FR 49111, Sept. 21, 1995; 66 FR 45386, Aug. 28, 2001; 75 FR 5397, Feb. 2, 2010]

## Subpart P—Large Packagings Standards

SOURCE: 75 FR 5397, Feb. 2, 2010, unless otherwise noted.

### § 178.900 Purpose and scope.

(a) This subpart prescribes requirements for Large Packaging intended for the transportation of hazardous materials. Standards for these packagings are based on the UN Recommendations.

(b) Terms used in this subpart are defined in § 171.8 of this subchapter.

### § 178.905 Large Packaging identification codes.

Large packaging code designations consist of: two numerals specified in paragraph (a) of this section; followed by the capital letter(s) specified in paragraph (b) of this section.

(a) Large packaging code number designations are as follows: 50 for rigid Large Packagings; or 51 for flexible Large Packagings.

(b) Large Packagings code letter designations are as follows:

- (1) “A” means steel (all types and surface treatments).
- (2) “B” means aluminum.
- (3) “C” means natural wood.
- (4) “D” means plywood.
- (5) “F” means reconstituted wood.
- (6) “G” means fiberboard.
- (7) “H” means plastic.
- (8) “M” means paper, multiwall.
- (9) “N” means metal (other than steel or aluminum).

### § 178.910 Marking of Large Packagings.

(a) The manufacturer must:

(1) Mark every Large Packaging in a durable and clearly visible manner. The marking may be applied in a single line or in multiple lines provided the correct sequence is followed with the information required by this section.