

marked on all IBCs manufactured, repaired or remanufactured after January 1, 2011 as follows:



(ii) Display the symbol in a durable and visible manner.

(iii) The symbol must not be less than 100 mm (3.9 inches) by 100 mm (3.9 inches).

(iv) For IBCs designed for stacking, the maximum permitted stacking load applicable when the IBC is in use must be displayed with the symbol. The mass in kilograms (kg) marked above the symbol must not exceed the load imposed during the design test, as indicated by the marking in paragraph (a)(1)(vii) of this section, divided by 1.8. The letters and numbers indicating the mass must be at least 12 mm (0.48 inches).

[Amdt. 178-103, 59 FR 38068, July 26, 1994, as amended by Amdt. 178-119, 62 FR 24743, May 6, 1997; 64 FR 10782, Mar. 5, 1999; 65 FR 50462, Aug. 18, 2000; 65 FR 58632, Sept. 29, 2000; 66 FR 33451, June 21, 2001; 66 FR 45387, Aug. 28, 2001; 74 FR 2269, Jan. 14, 2009; 75 FR 74, Jan. 4, 2010; 75 FR 5396, Feb. 2, 2010; 76 FR 3389, Jan. 19, 2011]

#### § 178.704 General IBC standards.

(a) Each IBC must be resistant to, or protected from, deterioration due to exposure to the external environment. IBCs intended for solid hazardous materials must be sift-proof and water-resistant.

(b) All service equipment must be so positioned or protected as to minimize potential loss of contents resulting from damage during IBC handling and transportation.

(c) Each IBC, including attachments, and service and structural equipment, must be designed to withstand, without loss of hazardous materials, the internal pressure of the contents and the stresses of normal handling and trans-

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port. An IBC intended for stacking must be designed for stacking. Any lifting or securing features of an IBC must be of sufficient strength to withstand the normal conditions of handling and transportation without gross distortion or failure and must be positioned so as to cause no undue stress in any part of the IBC.

(d) An IBC consisting of a packaging within a framework must be so constructed that:

(1) The body is not damaged by the framework;

(2) The body is retained within the framework at all times; and

(3) The service and structural equipment are fixed in such a way that they cannot be damaged if the connections between body and frame allow relative expansion or motion.

(e) Bottom discharge valves must be secured in the closed position and the discharge system suitably protected from damage. Valves having lever closures must be secured against accidental opening. The open or closed position of each valve must be readily apparent. For each IBC containing a liquid, a secondary means of sealing the discharge aperture must also be provided, e.g., by a blank flange or equivalent device.

(f) IBC design types must be constructed in such a way as to be bottom-lifted or top-lifted as specified in §§ 178.811 and 178.812.

[Amdt. 178-103, 59 FR 38068, July 26, 1994, as amended at 66 FR 45386, Aug. 28, 2001; 68 FR 61942, Oct. 30, 2003]