§ 178.710 Standards for flexible IBCs.

(a) The provisions of this section apply to flexible IBCs intended to contain solid hazardous materials. Flexible IBC types are designated:

(1) 13H1 woven plastic without coating or liner.
(2) 13H2 woven plastic, coated.
(3) 13H3 woven plastic with liner.
(4) 13H4 woven plastic, coated and with liner.
(5) 13H5 plastic film.
(6) 13L1 textile without coating or liner.
(7) 13L2 textile, coated.
(8) 13L3 textile with liner.
(9) 13L4 textile, coated and with liner.
(10) 13M1 paper, multiwall.
(11) 13M2 paper, multiwall, water resistant.

(b) Definitions for flexible IBCs:

(1) Flexible IBCs consist of a body constructed of film, woven plastic, woven fabric, paper, or combination thereof, together with any appropriate service equipment and handling devices, and if necessary, an inner coating or liner.
(2) Woven plastic means a material made from stretched tapes or monofilaments.
(3) Handling device means any sling, loop, eye, or frame attached to the body of the IBC or formed from a continuation of the IBC body material.
(4) Construction requirements for flexible IBCs are as follows:

(ii) The outer packaging must be secured to any detachable pallet to ensure stability in handling and transportation. Where a detachable pallet is used, its top surface must be free from sharp protrusions that might damage the IBC.
(iii) Strengthening devices, such as timber supports to increase stacking performance, may be used but must be external to the inner liner.
(iv) The load-bearing surfaces of IBCs intended for stacking must be designed to distribute loads in a stable manner.
(d) Wooden IBCs may not have a volumetric capacity greater than 3,000 L (793 gallons) or less than 450 L (119 gallons).

(2) Must be designed and tested to a capacity of no less than 50 kg (110 pounds).

Subpart O—Testing of IBCs

§ 178.800 Purpose and scope.

This subpart prescribes certain testing requirements for IBCs identified in subpart N of this part.

§ 178.801 General requirements.

(a) General. The test procedures prescribed in this subpart are intended to ensure that IBCs containing hazardous materials can withstand normal conditions of transportation and are considered minimum requirements. Each packaging must be manufactured and assembled so as to be capable of successfully passing the prescribed tests and of conforming to the requirements of §173.24 of this subchapter at all times while in transportation.

(b) Responsibility. It is the responsibility of the IBC manufacturer to ensure that each IBC is capable of passing the prescribed tests and of conforming to the requirements of §173.24 of this subchapter at all times while in transportation.

(c) Definitions. For the purpose of this subpart:

(1) IBC design type refers to an IBC that does not differ in structural design, size, material of construction, wall thickness, manner of construction and representative service equipment.

(2) Design qualification testing is the performance of the drop, leakproofness, hydrostatic pressure, stacking, bottom-lift or top-lift, tear, topple, righting and vibration tests, as applicable, prescribed in this subpart, for each different IBC design type, at the start of production of that packaging.

(3) Periodic design requalification test is the performance of the applicable tests specified in paragraph (c)(2) of this section on an IBC design type, in order to requalify the design for continued production at the frequency specified in paragraph (e) of this section.

(4) Production inspection is the inspection that must initially be conducted on each newly manufactured IBC.

(5) Production testing is the performance of the leakproofness test in accordance with paragraph (f) of this section on each IBC intended to contain solids discharged by pressure or intended to contain liquids.

(6) Periodic retest and inspection is performance of the applicable test and inspections on each IBC at the frequency specified in §180.352 of this subchapter.

(7) Different IBC design type is one that differs from a previously qualified IBC design type in structural design, size, material of construction, wall thickness, or manner of construction, but does not include:

(i) A packaging which differs in surface treatment;

(ii) A rigid plastic IBC or composite IBC which differs with regard to additives used to comply with §§178.706(c), 178.707(c) or 178.710(c);

(iii) A packaging which differs only in its lesser external dimensions (i.e., height, width, length) provided materials of construction and material thicknesses or fabric weight remain the same;

(iv) A packaging which differs in service equipment.

(d) Design qualification testing. The packaging manufacturer shall achieve successful test results for the design qualification testing at the start of production of each new or different IBC design type. The service equipment selected for this design qualification testing shall be representative of the type of service equipment that will be fitted to any finished IBC body under the design. Application of the certification mark by the manufacturer shall constitute certification that the IBC design type passed the prescribed tests in this subpart.

(e) Periodic design requalification testing. (1) Periodic design requalification must be conducted on each qualified IBC design type if the manufacturer is to maintain authorization for continued production. The IBC manufacturer...