

Subject: CFR 49 180.352

180.352 Requirements for retest & inspection of intermediate bulk containers

(a) General. Each IBC constructed in accordance with a UN standard for which a test or inspection specified in paragraphs (b)(1), (b)(2) and (b)(3) of this section is required may not be filled and offered for transportation or transported until the test or inspection has been successfully completed. This paragraph does not apply to any IBC filled prior to the test or inspection date. The requirements in this section do not apply to DOT 56 and 57 tanks.

(b) Test and inspections for metal, rigid plastic, and composite intermediate bulk containers. Each intermediate bulk container is subject to the following test and inspections:

(1) Each IBC intended to contain liquids or solids that are loaded or discharged under pressure must be tested in accordance with the leakproofness test prescribed in 178.813 of this subchapter every 2.5 years, starting from the date of manufacture or the date of a repair conforming to paragraph (d)(1) of this section.

(2) An external visual inspection must be conducted initially after production and every 2.5 years starting from the date of manufacture or the date of a repair conforming to paragraph (d)(1) of this section to ensure that:

(i) The IBC is marked in accordance with requirements in 178.703 of this subchapter. Missing or damaged markings, or markings difficult to read must be restored or returned to original condition.

(ii) Service equipment is fully functional and free from damage which may cause failure. Missing, broken, or damaged parts must be repaired or replaced.

(iii) The IBC is capable of withstanding the applicable design qualification tests. The IBC must be externally inspected for cracks, warpage, corrosion or any other damage which might render the IBC unsafe for transportation. An IBC found with such defects must be removed from service or repaired in accordance with paragraph (d) of this section. The inner receptacle of a composite IBC must be removed from the outer IBC body for inspection unless the inner receptacle is bonded to the outer body or unless the outer body is constructed in such a way (e.g., a welded or riveted cage) that removal of the inner receptacle is not possible without impairing the integrity of the outer body. Defective inner receptacles must be replaced in accordance with paragraph (d) of this section or the entire IBC must be removed from service. For metal IBCs, thermal insulation must be removed to the extent necessary for proper examination of the IBC body.

(3) Each metal, rigid plastic and composite IBC must be internally inspected at least every five years to ensure that the IBC is free from damage and to ensure that the IBC is capable of withstanding the applicable design qualification tests.

(i) The intermediate bulk container must be internally inspected for cracks, warpage, and corrosion or any other defect that might render the IBC unsafe for transportation. An IBC found with such defects must be removed from hazardous materials service until restored to the original design type of the intermediate bulk container.

(ii) Metal IBC must be inspected to ensure the minimum wall thickness requirements in 178.705(c)(1)(iv) of this subchapter are met. Metal IBCs not conforming to minimum wall thickness requirements must be removed from hazardous materials service.

178.813 Leakproofness test.

(a) General. The leakproofness test must be conducted for the qualification of all IBC design types and on all production units intended to contain liquids or intended to contain solids that are loaded or discharged under pressure.

(b) Special preparation for the leakproofness test. Vented closures must either be replaced by similar non-vented closures or the vent must be sealed. For metal IBC design types, the initial test must be carried out before the fitting of any thermal insulation equipment. The inner receptacle of a composite IBC may be tested without the outer packaging provided the test results are not affected.

(c) Test method and pressure applied. The leakproofness test must be carried out for a suitable length of time using air at a gauge pressure of not less than 20kPa (2.9 psig). Leakproofness of IBC design types must be determined by coating the seams and joints with a heavy oil, a soap solution and water, or other methods suitable for the purpose of detecting leaks. Other methods, if at least equally effective, may be used in accordance with Appendix B of this part, or if approved by the Associate Administrator for Hazardous Materials Safety, as provided in 178.801 (i).

(d) Criterion for passing the test. For all IBC design types intended to contain liquids or intended to contain solids that are loaded or discharged under pressure, there may be no leakage of air from the IBC.