

other than production residues or regrind from the same manufacturing process may be used. The packaging must be adequately resistant to aging and to degradation caused either by the substance contained or by ultraviolet radiation.

(b) [Reserved]

[74 FR 2268, Jan. 14, 2009]

§ 178.33b-7 Design qualification test.

(a) *Drop testing.* (1) To ensure that creep does not affect the ability of the container to retain the contents, each new design must be drop tested as follows: Three groups of twenty-five filled containers must be dropped from 1.8 m (5.9 ft) on to a rigid, non-resilient, flat and horizontal surface. One group must be conditioned at 38 °C (100 °F) for 26 weeks, the second group for 100 hours at 50 °C (122 °F) and the third group for 18 hours at 55 °C (131 °F), prior to performing the drop test. The closure, or sealing component of the container, must not be protected during the test. The orientation of the test container at drop must be statistically random, but direct impact on the valve or valve closure must be avoided.

(2) *Criteria for passing the drop test:* The containers must not break or leak.

(b) Design qualification testing must be completed if the design is manufactured with a new mold or if there is any change in the properties of the material of construction.

[75 FR 73, Jan. 4, 2010]

§ 178.33b-8 Production tests.

(a) *Burst Testing.* (1) One out of each lot of 5,000 containers or less, successively produced per day must be pressure tested to destruction and must not burst below 240 psig. The container tested must be complete as intended for transportation.

(2) Each such 5,000 containers or less, successively produced per day, shall constitute a lot and if the test container shall fail, the lot shall be rejected or ten additional containers may be selected at random and subjected to the test under which failure occurred. These containers shall be complete as intended for transportation. Should any of the ten containers thus tested fail, the entire lot must be rejected. All

containers constituting a lot shall be of like material, size, design construction, finish, and quality.

(b) [Reserved]

[74 FR 2268, Jan. 14, 2009, as amended at 75 FR 74, Jan. 4, 2010]

§ 178.33b-9 Marking.

(a) Each container must be clearly and permanently marked to show:

(1) DOT-2S.

(2) Name or symbol of person making the mark specified in paragraph (a)(1) of this section. Symbol, if used, must be registered with the Associate Administrator.

(b) [Reserved]

[74 FR 2268, Jan. 14, 2009]

§ 178.33c Specification 2P; inner non-refillable metal receptacle variation.

§ 178.33c-1 Compliance.

Required in all details.

[81 FR 3685, Jan. 21, 2016]

§ 178.33c-2 Variation.

Notwithstanding the variation provided in this section, each container must otherwise conform to a DOT 2P container in accordance with § 178.33. The following conditions also apply under Variation 1—

(a) *Manufacture.* Side seams: not permitted. Ends: The ends shall be designed to withstand pressure and be equipped with a pressure relief system (e.g., rim-venting release or a dome expansion device) designed to function prior to bursting of the container.

(b) *Tests.* (1) One out of each lot of 25,000 containers or less, successively produced per day complete with ends assembled (and without a pressure relief system assembled) shall be pressure tested to destruction at gauge pressure and must not burst below 240 psig. For containers with a pressure relief system as described in paragraph (a) of this section and assembled, failure at a location other than the pressure relief system will reject the lot. For containers with an end expansion device, the lot must be rejected if the container bursts prior to buckling of the device.