

ATTACHMENT H

Commonwealth of Pennsylvania
Department of Transportation

Specification For Polyethylene Caged Bottle Paint Totes

1. Scope

- 1.1 This specification covers caged bottle paint totes {a.k.a. composite intermediate bulk containers (IBCs)} made of blow-molded high molecular high density polyethylene (HDPE) enclosed by a galvanized square tubular steel cage. Included are requirements for materials, construction, tolerances and workmanship. Tote capacity is 275 gallons (1,040 L).

2. Materials

- 2.1 The material used shall be HDPE resin as compounded and certified by the manufacturer.
- 2.2 The HDPE resin shall contain a U.V. stabilizer as compounded by the resin manufacturer.
- 2.3 The frame and pallet shall be zinc galvanized tubular steel.

3. Design Requirements

- 3.1 Totes shall be reusable HDPE intermediate bulk containers capable of handling bulk liquids of 1.9 specific gravity. Foot print dimensions shall not exceed 48 inches for either width or depth.
- 3.2 Totes shall be UN / D.O.T certified for shipping and handling of bulk liquids with a maximum of 1.9 specific gravity as required by Code of Federal Regulations (CFR) Title 49 Part 178.
- 3.3 Totes shall have a base that allows four-way forklift and pallet jack handling. The totes shall be capable of being stacked a minimum of two high when completely filled with paint.

4. Workmanship

- 4.1 The finished tank wall shall be free, as commercially practicable, of visual defects such as foreign inclusions, dried paint, air bubbles, pinholes, pimples, crazing, cracking and delaminations that will impair the serviceability of the vessel. Fine bubbles are acceptable with tanks to the degree in which they do not interfere with proper fusion of the resin melt.

5. Tank Fittings / Attachments

- 5.1 Bottom Drain Valve.
 - 5.1.1 2" (51mm) BANJO full port polypropylene bolted ball valve with a 2" (51mm) male quick disconnect fitting. Includes dust cap and cap lanyard. The valve and disconnect shall be leak free and compatible with waterborne paint.
- 5.2 Top Fill Lid
 - 5.2.1 The top lid shall be a 6" screw cap style lid, and shall be easily opened by hand. The screw cap shall have a 2" bung incorporated into it to provide a vacuum vent.

6. Markings / Certifications

6.1 Gallonage Marker

6.1.1 Tote shall have a molded-in gallon marker for at-a-glance monitoring.

6.2 Certification

6.2.1 Tote shall have markings for U.N. / D.O.T. shipping classification, capacity, tare mass, the month, day and year of manufacture, and manufacturer name, city and state as required by CFR 49 Part 178.703.

6.3 Totes shall have either a document holder attached or direct stenciling to the side that will clearly convey the following:

- company name
- color of paint
- quantity of paint contained
- batch number
- formula code
- other information as may be specified/requested by the Pennsylvania Department of Transportation