



# Submittal Information for Spears® Manufacturing Company LabWaste® CPVC Corrosive Waste Drainage System

GSLW-0922

Date: \_\_\_\_\_

Job Name: \_\_\_\_\_ Location: \_\_\_\_\_

Engineer: \_\_\_\_\_ Contractor: \_\_\_\_\_

**Scope:**  
This submittal covers the Spears® LabWaste® CPVC Corrosive Waste Drainage System which is sold as a complete system and consists of pipe, fittings and a chemically resistant one-step primerless cement for use in non-pressure, intermittent corrosive waste applications where the application operating temperature does not exceed 220° F (104°C).

**Product Specification:**  
Spears® LabWaste® CPVC Corrosive Waste Drainage System for corrosive chemical or acid waste shall be manufactured in the U.S.A. from CPVC Type IV, with a minimum cell classification of 23447 in accordance with ASTM D1784. System pipe and fittings shall be manufactured in accordance with ASTM F2618 and certified by NSF International for use in corrosive waste drainage systems and CSA B181.2 for use in Canada. LabWaste® pipe and fittings tested dry shall be listed by ICC-ES PMG-1278 to ASTM E84/UL723 having a flame spread of less than 25 and smoke developed index of less than 50. (See PMG Listing No. PMG-1278 at www.icc-es-pmg.org). LabWaste® pipe and fittings shall be approved and listed by ICC-ES PMG-1018 for use in accordance with the Uniform Plumbing Code (UPC) by the International Codes Council Evaluation Services (ICC-ES), and PMG Listing Criteria for Chlorinated Poly Vinyl Chloride (CPVC) System of Pipe Fittings and Solvent Cement Used in Chemical Waste Systems, LC1007 (See PMG Listing No. PMG-1018 at www.icc-es-pmg.org). LabWaste® pipe and fittings tested dry shall be listed by Underwriters Laboratories of Canada to CAN/ULC S102.2 having a flame spread of less than 25 and smoke developed index of less than 50. LabWaste® system shall be listed to CSA ORD 1022 by NSF International. Pipe and solvent cement shall be certified to UL 2818 GREENGUARD GOLD. LabWaste® installation training is recommended. Contact Spears® to schedule a training class.

**Product Marking:**  
All Spears® LabWaste® CPVC pipe shall be accompanied by a yellow stripe for identification as CPVC chemical waste drainage system. LabWaste® CPVC pipe shall have ICC-ES PMG E84 25/50 rated marking and GREENGUARD GOLD marking. All fittings shall be CPVC drainage patterns meeting the applicable requirements of ASTM D3311 or the manufacturer’s specifications. Joining method for pipe and fittings shall be solvent cement welding. Solvent cement shall be a “one-step” primerless type CPVC cement (LW-5) specially formulated for resistance to corrosive chemicals and manufactured in accordance with ASTM F2618 and F493. Pipe and cement shall have GREENGUARD GOLD marking.

All pipe, fittings, and cement shall be supplied together as a complete system

with a Lifetime Warranty, as Spears® LabWaste® CPVC Corrosive Waste Drainage Systems manufactured by Spears® Manufacturing Company.

**Installation:**  
Installation practices such as pipe support spacing, bracing, allowance for thermal expansion/contraction, solvent cementing and handling and storage shall be in accordance with the manufacturer’s instructions and this specification. Buried pipe shall be in accordance with ASTM F1668. The piping system shall be joined using a chemically resistant one-step solvent cement joining process conforming to ASTM F493. The system shall be protected from ultra violet (UV) light exposure from the sun or other source and protected from any chemicals that are not compatible with the CPVC materials including but not limited to fire stopping materials, plasticizers, incompatible thread sealants etc.

**NOTE:** A hydrostatic leak test shall consist of a minimum of ten (10) foot (3048 mm) head for entire LabWaste® system or section tested.

- Referenced Standards:**
- ASTM D1784 – Rigid Vinyl Compounds
  - ASTM D3311 – Drainage Pattern Fittings
  - ASTM F493 – Solvent Cements for CPVC Pipe & Fittings
  - ASTM F1668 – Procedures for Buried Plastic Pipe
  - ASTM F2618 – CPVC Corrosive Drainage Systems
  - ASTM/E84/UL723 – Flame & Smoke Testing
  - CAN/ULC S102.2 – Flame & Smoke Testing

- Approvals:**
- CAN/ULC S102.2 – Flame & Smoke Testing
  - CSA 181.2 - CPVC Drain, Waste, and Vent Pipe and Pipe Fittings
  - ICC-PMG 1018 – Listing for Chemical Waste Use
  - ICC-PMG 1278 – Listing for Plenum Use
  - NSF® – NSF International Standard 14 – Corrosive Waste (CW)
  - NSF International CSA ORD 1022 – Listing - Other Referenced Document
  - UL – GREENGUARD GOLD Certified UL 2818

## PROJECT APPROVAL

Approved: \_\_\_\_\_  
PRINT

Sign: \_\_\_\_\_

Date: \_\_\_\_\_

