



## Patented

Spears® **LabWaste™** CPVC Drainage System is a Complete system of pipe, fittings & solvent cement featuring excellent chemical resistance, fire performance properties, light weight and ease of installation. Designed and specifically tested for use in commercial, industrial, and institutional drainage system applications involving corrosive /acid wastes, this unique product developed by Spears® has been awarded a U.S. Patent, No. 7,178,557. Available in nominal 1-1/2" through 24" Iron Pipe Size (IPS) diameters..

**IMPORTANT** – The information in this section is introductory only. Please refer to Spears® publication, **LabWaste™ CPVC Technical Information & Installation Guide**, for additional details and technical information.

## Laboratory Applications

Its broad range of resistance to chemical and corrosive wastes make Spears® **LabWaste™** CPVC systems very well suited for commercial, institutional and academic laboratory drainage installations. These applications are best characterized as the routine disposal of a wide variety of hot and cold chemicals in relatively small quantities accompanied by water for the purpose of dilution and flushing. Due to the interactions potentially encountered in multi-chemical laboratory drainage disposal, Spears® recommends routine flushing of the system with water during disposal as a part of prudent laboratory practices. A properly designed and installed **LabWaste™** CPVC system provides total dilution and disposal need for years of dependable service.

## Industrial & Commercial Special Waste Applications

Spears® **LabWaste™** CPVC products can be used in a very broad variety of dedicated waste applications with proper evaluation of waste medium and service conditions. For non-laboratory applications, refer to CPVC pressure system resistance data in this manual for appropriate chemical resistance guidelines. DO NOT follow **LabWaste™** Chemical Resistance Table recommendations for laboratory use in Spears® technical information guide. Please contact Spears® Technical Services for additional information.

## Listings & Approvals

Spears® **LabWaste™** CPVC Drainage System is manufactured in strict compliance to ASTM F 2618, is listed by IC-ES-PMG for conformance to both the Uniform Plumbing Code and the International Plumbing for chemical waste systems under PMG-1018, and is certified by NSF International both to IAPMO IGC 210 and for use in corrosive waste systems (NSF®-cw).

## Fire Resistance

Material used in Spears® **LabWaste™** CPVC systems has a UL 94 flammability rating of V-0, 5VB. Pipe and fittings have been Listed and rated based on *finished product* tests, as opposed to a material test only, for surface burning characteristics of flame spread and smoke density developed by Underwriters Laboratories of Canada under standard test method CAN/ULC S102.2-M88. Additional test of **LabWaste™** pipe with dry fit caps was conducted by Southwest Research Institute (SwRI) Department of Fire Technology under UL 723/ASTM E 84 (modified to test finished product). Pipe and fitting components ratings are below the 25 maximum flame spread and 50 maximum smoke density developed typically required for exposed air plenum installation. Check local codes for acceptability. Use of approved plenum wrap or transition connectors to other material may be used if required.

## Pipe Dimensions

Spears® **LabWaste™** CPVC Drainage System products produced to ASTM F 2618 have the same dimensional specifications for pipe as for Schedule 40 CPVC through 24" nominal IPS diameters. See corresponding pipe dimensions section in this manual.

## Fittings Configurations

Spears® a wide variety of **LabWaste™** CPVC drainage pattern fittings produced to ASTM F 2618. See Spears® publication, **LabWaste™** CPVC Technical Information & Installation Guide for fitting details.

## Joining Methods

### Solvent Cement Welding

Spears® **LabWaste™** CPVC Drainage System piping is joined using a special one-step solvent cement specifically listed and approved for use in CPVC corrosive waste applications. Follow basic solvent cementing guideline under the Installation section using only **LabWaste™** CPVC one-step solvent cement.

### Transitions & Other Connections

Standard threaded and flanged connections can be made using system components. A variety of special connectors are produced for transition to polypropylene, Duriron and glass systems waste piping systems.

Please refer to Spears® publication, **LabWaste™** CPVC **Technical Information & Installation Guide**, for Physical Properties, Engineering Data, and **LabWaste™** Chemical Resistance Guide for laboratory applications. **DO NOT** use Chemical Resistance Guide for Pressure Piping contained in this manual.