Proven Solvent Cement Joining Eliminates Troublesome Fusion Equipment, Mechanical Joints & Elastomer Problems


• Complete System of Pipe, Fittings & Adapters
• Meets 25/50 Flame & Smoke Requirement for use in Return Air Plenums
• Non-Pressure Drainage Service to 220º F
• All CPVC Construction in a Full Assortment of Standard DWV Patterns
• Accessories including Drains, Neutralization Tanks, and Dilution Traps
• Specially Formulated One-Step Solvent Cement Provides Chemical Resistance Equal to System Pipe & Fittings – Now in Special Yellow Color

Chemical & Corrosion Resistant CPVC
One of the key advantages of Spears® LabWaste™ CPVC System is its excellent resistance to a broad range of corrosive environments. CPVC is inert to most mineral acids, bases, salts and aliphatic hydrocarbons, and compares favorably to other plastics in these chemical environments.

General Chemical Resistance Overview:

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<tr>
<th></th>
<th>Weak Acids</th>
<th>Excellent</th>
<th>Salts</th>
<th>Excellent</th>
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<tbody>
<tr>
<td>Strong Acids</td>
<td>Excellent</td>
<td>Aliphatic Solutions</td>
<td>Good</td>
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<tr>
<td>Weak Bases</td>
<td>Excellent</td>
<td>Halogens</td>
<td>Good-Fair</td>
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</tr>
<tr>
<td>Strong Bases</td>
<td>Excellent</td>
<td>Strong Oxidants</td>
<td>Good-Fair</td>
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The LabWaste™ CPVC System has been developed for use in Academic, Research, and Institutional Laboratory chemical waste drainage applications. These plumbing systems are characterized by the routine disposal of a wide variety of hot and cold chemical wastes in accordance with prudent laboratory practices for drainage disposal.

Manufactured to ASTM F 2618 in Full Line of Drainage Pattern Fitting Configurations
Spears® broad line of LabWaste™ CPVC pipe & fittings are manufactured to ASTM F 2618 Specifications for CPVC Pipe & Fittings for Chemical Waste Drainage Systems and produced in ASTM D 3311 drainage patterns or to manufacturer’s specifications. Standard configurations are available in nominal sizes of 1-1/2" through 24" with many specialty fittings and accessories, like dilution traps, (water dilution being critical in the prevention of exothermic chemical interactions within all plumbing systems).

NSF® Certified For Corrosive Waste

Cost Saving Solvent Weld Joining Eliminates the need for Electro-Fusion Joints and for Mechanical Joint Connections in Concealed Spaces
A proven joining method reliably used for over 50 years, Solvent Cement Welding requires no special tools, no costly fusion easy installation, repairs or alterations. Most importantly, solvent cement joints end problems typical of polypropylene system installation, such as mechanical connector pullout, maintaining mechanically sealed joints, leaks from fusion wire corrosion, and cumbersome fusion joining methods. Saves time, saves cost, saves worry!

A Flame & Smoke Rated Piping System
Spears® LabWaste™ system components have tested dry been Listed by ICC-ES PMG 1278 for Compliance with ASTM E84/UL723 Tests for Surface Burning Characteristics having a flame spread of < 25 and a smoke developed index of < 50 meeting the requirements of the International Mechanical Code and Uniform Mechanical Code for use in return air plenums (See PMG Listing No. PMG-1278 at www.icc-es-pmg.org). LabWaste™ is additionally Listed by Underwriters Laboratories of Canada (ULC®) under CAN/ULC S102.2 for Surface Burning Characteristics of less than 25/50
Spears® LabWaste™ CPVC Corrosive Waste Drainage System is a complete system of pipe, fittings and solvent cement independently (3rd party) tested, evaluated and certified by the following laboratories and agencies. Each of these approvals is routinely monitored through an ongoing program of periodic inspection and testing by the certifying agency.


**NSF ORD 10222 For Use in Canada** - Certified for use in Canada by NSF International under the Standards Council of Canada as an Other Recognized Document (ORD) that defines the product specific requirements for Chlorinated Poly Vinyl Chloride (CPVC) Chemical Waste Systems, in accordance with ASTM F 2618 requirements.

**Uniform Plumbing Code** - Certified for use in accordance with the Uniform Plumbing Code (UPC) by NSF International (NSF U.P. Code) as specified in ASTM F2618 Additionally Listed for use in accordance with the Uniform Plumbing Code (UPC) by the International Codes Council Evaluation Services (ICC-ES) in accordance with PMG Listing Criteria under listing number PMG-1018 (See PMG Listing No. PMG-1018 at www.icc-es-pmg.org).

**International Plumbing Code** - Approved for use in accordance with the International Plumbing Code (IPC) by the International Codes Council Evaluation Services (ICC-ES) in accordance with PMG Listing Criteria under listing number PMG-1018 (See PMG Listing No. PMG-1018 at www.icc-es-pmg.org).

**Uniform Mechanical Code** - Listed by the International Codes Council Evaluation Services (ICC-ES PMG) in accordance with ASTM E84 and UL® 723 for compliance with requirements of the Uniform Mechanical Code® (UMC) for use in return air plenums by having a Flame Spread/Smoke Development of less than 25/50, respectfully, under listing number PMG-1278 (See PMG Listing No. PMG-1278 at www.icc-es-pmg.org).

**International Mechanical Code** - Listed by the International Codes Council Evaluation Services (ICC-ES PMG) in accordance with ASTM E84 and UL® 723 for compliance with requirements of the International Mechanical Code® (IMC) for use in return air plenums by having a Flame Spread/Smoke Development of less than 25/50, respectfully, under listing number PMG-1278 (See PMG Listing No. PMG-1278 at www.icc-es-pmg.org).

**Canadian Surface Burning Characteristics** - by Underwriters Laboratory of Canada (ULC®) for evaluation of Flame Spread and Smoke Density in accordance with CAN/ULC S102.2 for finished product having a Flame Spread/Smoke Development of less than 25/50, respectfully.

**Flammability & Surface Burning Characteristics**

<table>
<thead>
<tr>
<th>Flammability Rating: V-0</th>
<th>UL94: Tests for Flammability of Plastic Materials</th>
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<tbody>
<tr>
<td>Flame &amp; Smoke Ratings:</td>
<td>ASTM E84/UL723 Surface Burning Characteristics</td>
</tr>
<tr>
<td>Flame Spread:</td>
<td>ICC-ES PMG Listing Number PMG-1278</td>
</tr>
<tr>
<td>Smoke Developed:</td>
<td>Listed to CAN/ULC S102.2: Surface Burning Characteristics</td>
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**Spears® LabWaste™ - A Complete System**

Spears® LabWaste™ is offered as a complete system of pipe, fittings, and solvent cement. A broad assortment of additional accessories are available including Drains, Neutralization Tanks, Dilution Traps, Valves, Unions, Flanges and Adapters. Fitting configurations are produced to applicable DWV patterns of ASTM D 3311, *Standard Specification for Drain, Waste, and Vent (DWV) Plastic Fitting Patterns*, and various specialty patterns to manufacturer’s specifications. All drainage fittings with 90° angles (sanitary tees, elbows, etc.) have socket pitch to maintain approximately 1/4” per foot drainage.

**System Integrity – Lifetime Warranty**

Spears® LabWaste™ products have been developed and designed to be used as a total system consisting of pipe, fittings, accessories, solvent cement and thread sealant. All Spears® LabWaste™ components must be used in order to ensure a sound piping system. Substitution of other products for Spears® LabWaste™ pipe, fittings, or solvent cement may be detrimental to system integrity and is not recommended. The Spears® Limited Lifetime Warranty (located at the end of this brochure) does not cover problems occurring as the direct result of the use of products other than Spears® LabWaste™ system products, or products and materials not compatible with CPVC materials.

**System Transition Adapters**

Transitioning from PP, PVDF, Glass, Duriron, or other systems to Spears® LabWaste™ CPVC is easy using one of Spears® special transition adapters available in sizes 1-1/2” through 8” piping.
Spears® LabWaste™ Custom System Accessories

**Acid Neutralization/Dilution Tanks for Use With LabWaste™ CPVC Systems**

Neutralization or dilution tanks are required by codes for the purpose of neutralizing corrosive wastes. Corrosive liquids, spent acids or other harmful chemicals that destroy or injure a drain, sewer, soil or waste pipe, or create noxious or toxic fumes or interfere with sewage treatment processes are prohibited from being discharged into the plumbing system without being neutralized or treated. Spears® offers a standard selection of HDPE tanks in 5 gallon to 3000 gallon capacities and CPVC tanks in 5 gallon to 55 gallon capacities to meet these needs. Tanks can also be produced in virtually any custom size, shape, or connection configuration. Contact Spears® Technical Services with desired specifications for custom quotation. See Spears® SSB-1 Super Sourcebook Catalog under LabWaste™ CPVC Corrosive Waste Drainage Systems pricing and technical information under LabWaste™ Neutralization Tanks & Accessories for additional information on features and options.

**LabWaste™ Floor Drains & Cleanouts**

Spears® LabWaste™ CPVC Floor Drains are available for connection to 1-1/2" through 4" drainage pipe. Standard drains have adjustable 5" round CPVC grates and can be ordered with optional CPVC 1/8" perforated sediment strainer to trap debris. CPVC drains also available with adjustable round Stainless Steel grates in 5", 6", 7" or 8" diameters. Standard CPVC Floor Cleanouts have 5" round, adjustable Stainless Steel access covers. All Floor Drains and Floor Cleanouts are available with optional membrane plate for clamping housing to waterproof membranes when used in floor installations.

**American Bureau of Shipping (ABS) Type Approval**

Spears® OceanTUFF™ (a.k.a. LabWaste™) CPVC Corrosive Waste Drainage System pipe and fittings are ABS Type Approved for marine and offshore applications in nominal pipe sizes through 12". Type Approval details and restrictions are specified in ABS Certificate # 10-HS539421-2-PDA available on the ABS website at www.eagle.org.

**Sample Engineering Specification**

Special drainage systems for corrosive chemical or acid waste shall be manufactured from CPVC Type IV, minimum ASTM Cell Classification 23447. System pipe and fittings shall be manufactured in accordance with ASTM F 2618 and certified by NSF International for use in corrosive waste drainage systems. Pipe and fittings tested dry shall be Listed by ICC-ES PMG to ASTM E84/UL723 having a flame spread of less than 25 and smoke developed index of less than 50 and 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 as designated on the pipe marking or fitting package labeling. All pipe markings shall be accompanied by a yellow stripe for identification as CPVC chemical waste drainage system. All fittings shall be CPVC drainage patterns meeting the applicable requirements of ASTM D 3311 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 specially formulated for resistance to corrosive chemicals and manufactured in accordance with ASTM F 2618 and F 493. 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.
SPEARS® MANUFACTURING COMPANY
LIMITED LIFETIME WARRANTY

Except as otherwise specified for certain products, mandated by law or herein provided, Spears® Manufacturing Company ("Company") warrants Standard Catalog Products ("Products") which have been directly manufactured by them to be free from defects in material and workmanship for as long as the original intended end user of the Products ("End User") retains ownership and possession of the Products and complies with this Warranty ("Warranty Period"). Each other person or entity acquiring or employing the Products, including buyers, contractors and installers ("Buyer") and End Users ("Buyer/End User") agrees that this Warranty shall be effective only during the Warranty Period so long as the Products are used solely for the normal purposes for which they are intended and in conformance with industry established standards, engineering, installation, operating, and maintenance specifications, recommendations and instructions including explicit instructions by the Company; the Products are properly installed, operated and used, and have not been modified; and all the other terms of this Warranty are complied with. Any violation thereof shall void this Warranty and relieve Company from all obligations arising from this Warranty and the Products.

Upon receipt or discovery of any Products that appear questionable or defective each Buyer/End User shall promptly inspect and return any such Product to the Company at 15853 Olden Street, Sylmar, California 91342, accompanied by a letter stating the nature of any problems. If the Products are determined by Company to be defective in materials or workmanship which was not provided, may either repair or replace the defective Products, or reimburse applicable Buyer/End User for the cost of such Products. The applicable Buyer/End User shall bear all applicable shipping costs. THIS SHALL BE BUYER/END USERS’ SOLE REMEDY. EACH BUYER/END USER AGREES THAT COMPANY WILL NOT BE RESPONSIBLE FOR ANY OTHER OBLIGATIONS RELATING TO THE PRODUCTS, INCLUDING ANY OTHER MATERIALS OR LABOR COSTS, LOSS OF USE OR ANY OTHER ITEM OR FOR ANY DELAYS IN COMPLYING WITH THIS WARRANTY BEYOND COMPANY’S REASONABLE CONTROL.

COMPANY SHALL NOT BE LIABLE FOR, DOES NOT ASSUME, AND EXPRESSLY DISCLAIMS, ANY LIABILITY, RESPONSIBILITY AND DAMAGES: DUE TO ANY BUYER/END USER’S FAILURE TO COMPLY WITH THIS WARRANTY, INCLUDING IMPROPER INSTALLATION, USE OR OPERATION; USE WITH PRODUCTS FROM OTHER MANUFACTURERS THAT DO NOT MEET ASTM OR OTHER APPLICABLE PRODUCT STANDARDS; IMPROPER CONTROL OF SYSTEM HYDRAULICS, IMPROPER WINTERIZATION PROCEDURES, IMPROPER VOLTAGE SUPPLY, CONTACT WITH INCOMPATIBLE MATERIALS OR CHEMICALS, EXCAVATION/DIGGING, EXCESSIVE WEIGHT, AND VANDALISM; DUE TO REASONABLE WEAR AND TEAR AND DUE TO ANY ACTS OF NATURE, INCLUDING LIGHTNING, EARTHQUAKES, GROUND MOVEMENT, FROST HEAVE, OR FLOODS.

COMPANY EXTENDS ONLY THIS WARRANTY AND EXPLICITLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER IMPLIED OR OTHERWISE EXPRESSED, WHETHER ORAL, STATUTORY OR OTHERWISE, INCLUDING ANY IMPLIED WARRANTIES OR AFFIRMATIONS FOR SUITABILITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO AFFIRMATION BY COMPANY OR ANY OF ITS REPRESENTATIVES, BY WORDS, CONDUCT OR OTHERWISE, SHALL CONSTITUTE A WARRANTY. THIS WARRANTY MAY NOT BE TRANSFERRED, EXTENDED, ALTERED OR OTHERWISE MODIFIED IN ANY MANNER, EXCEPT BY WRITTEN AGREEMENT SIGNED BY COMPANY.

BY ITS ACCEPTANCE OF THE PRODUCTS, EACH BUYER/END USER EXPRESSLY WAIVES ALL OTHER LIABILITY OR OBLIGATION OF ANY KIND OR CHARACTER OF COMPANY, INCLUDING LIABILITY PREDICATED UPON CONTRACT, TORT, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE GROUNDS, AND ALL, IF ANY, DAMAGES AND LOSSES AS A RESULT THEREOF, INCLUDING ALL, IF ANY, COMPENSATORY, GENERAL, SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR PUNITIVE DAMAGES. WITH RESPECT TO SUCH WAVERS, EACH BUYER/END USER EXPRESSLY WAIVES CALIFORNIA CIVIL CODE § 1542 WHICH STATES "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THIS RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY ADVERSELY AFFECTED HIS SETTLEMENT WITH DEBTOR" AND ALL OTHER SIMILAR STATUTORY, COMMON AND CASE LAW RIGHTS, DEFENSES AND LIMITATIONS.

Having previously independently inspected the Products, or a sample, as fully as desired, or having the opportunity to and having not done so, upon acceptance of the Products, and except as otherwise herein explicitly provided, each Buyer/End User by acceptance or use of the Products accepts them in their “AS IS” and “WITH ALL FAULTS” condition without any other warranty, expressed, implied or otherwise, and accepts and assumes the entire risk and cost of all servicing, remediation and consequences thereof. This Warranty shall be governed by California law and any unenforceable provisions severed without affecting the remaining provisions. As used herein, “including” includes “without limitation.”

For LabWaste™ Product Line Information See Publications:
SSB-1 SUPER SOURCEBOOK List Price Catalog Plastic Fittings, Valves, Pipe & Cement
LabWaste™ CPVC Corrosive Waste Drainage System (Pages 573-588)
LabWaste™ CPVC Corrosive Waste Drainage System Technical Information

Suitable for low pressure air handling 5 psi, not for distribution of compressed air or gas

Progressive Products From Spears® Innovation & Technology