



# SPEARS® MANUFACTURING COMPANY

## FS-5 RED



### TECHNICAL SPECIFICATIONS Low VOC CPVC Solvent Cement

#### PRODUCT:

Spears® FlameGuard® FS-5 RED One-Step (no primer required) CPVC cement specifically formulated and approved for use with Spears® FlameGuard® and other approved CPVC Fire Sprinkler Products with interference fit through 3".

#### INTENDED USE:

Spears® FS-5 is approved for use with Spears® FlameGuard® and other approved CPVC Fire Sprinkler Products. See publication FG-3, FlameGuard® Installation Instructions for additional application details.

#### GENERAL PRODUCT SPECIFICATIONS:

COLOR:	Red
RESIN:	CPVC
SPECIFIC GRAVITY:	0.985 ± 0.04
BROOKFIELD VISCOSITY	Heavy Body - Minimum 1600 cP@ 73 ± 2°F (23°C +1° C)
RELATIVE SET:	Fast
MAX VOC EMISSIONS:	490 g/L per SCAQMD Rule 1168/316A
SHELF LIFE:	2 years from date stamped on the bottom of container.

**Note:** Product usability is limited by the evaporation of the solvents when the container is opened and can cause the cement to thicken and reduce its usefulness. Always seal the can tightly between uses to prevent the solvent from becoming thickened, stringy or jelled. Do not add thinners to change viscosity of thickened cement. Significant changes in cement properties can result.


#### CONFORMANCE STANDARDS AND APPROVALS:

- NSF®/ANSI Standard 14 Listed and Certified for compliance to ASTM F493
- NSF®/ANSI Standards 14/61 Listed and Certified for Potable Water, Drain Waste and Vent, and Sewer service use (NSF®-PW, DWV, SW) NSF® Listed and Certified to requirements of the Uniform Plumbing Code (NSF® U.P. Code); NSF® Certified Lead-Free.
- FM® and UL® approved for use with Spears® FlameGuard® and other approved CPVC Fire Sprinkler Products.
- Meets SCAQMD Rule 1168/316A for Compliance with LEED® (Leadership in Energy and Environmental Design). Low VOC product credit can be claimed for LEED Green Building Rating System - Indoor Environmental Quality.

#### PACKAGING, SHIPPING & TRANSPORTATION INFORMATION:

<u>Can Size</u>	<u>Standard Case Quantity</u>
Pint	12
Quart	12

**The following is general information for ground shipping, see SDS FS5-6 for additional detail.**

Proper Shipping Name: Adhesive	<b>Exceptions for Quantities &lt; 1 liter</b>
Hazard Class: 3	Classification: Limited Quantity
Identification Number: UN 1133	49CFR172.315 Marking:
Packing Group: II	
Label Required: Class 3 Flammable Liquid	

**Note:** Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.

## SAFETY & USE PRECAUTIONS:

**WARNING:** CAN CAUSE SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Keep away from heat, spark, open flame, other sources of ignition. Vapors may ignite explosively. Use only in well ventilated area; if not well ventilated, use forced ventilation or NIOSH approved respirator. Avoid breathing vapors. Do not smoke, eat or drink while using. Avoid contact with skin and eyes. Use skin and eye protection. Eye contact may cause injury. Keep container closed when not in use. Contains Tetrahydrofuran (CAS#109-99-9); Methyl Ethyl Ketone (CAS# 78-93-3); Cyclohexanone (CAS# 108-94-1); Acetone (CAS# 67-64-1); CPVC Resin (CAS# 68648-82-8).

### FIRST AID

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.

**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

### INSTALLATION & INSTALLER TRAINING

FS-5 is specialty cement; see Spears® publication FG-3, FlameGuard® Installation Instructions, for specific details and limitations. Installation instructions are printed on the can label and instructional information is available on Spears® website at [www.spearsmfg.com](http://www.spearsmfg.com). Certified Installers Training for FlameGuard® CPVC Fire Sprinkler Systems is also available. Contact Spears® for additional instructional information or formal training.

### AVOID USE AROUND DRY GRANULATED CALCIUM HYPOCHLORITE

While CPVC Fire Sprinkler Systems typically are not disinfected, a fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems that are exposed to organic vapors found in solvent cements, cleaners or primers when a water solution is not used. Calcium hypochlorite is a strong oxidizer and common in Pool & Spa chemicals such as “pool-shock”. If required, it is recommended to purify lines by pumping nonvolatile chlorinated water into the piping system. Do not store or use dry granular calcium hypochlorite near solvent cements, cleaners and primers.

**Refer to Safety Data Sheet (SDS), Spears® publication FS5-6, for more information.**

### LIMITED LIFETIME WARRANTY:

Spears® Manufacturing Company warrants all new Solvent Cement and Primer products shall be free from defects in material and workmanship for the specified product shelf life based on the assigned manufactured date on the original product container. If any such product becomes defective under normal use and storage conditions during this warranty period, Spears® will replace the nonconforming solvent cement or primer product without charge. Spears® liability will be limited, without exception, to product replacement. Spears® further warrants properly made solvent cement joints using this product for the life of the system. See Spears® standard Limited Lifetime Warranty for additional detailed information and exclusions.

***Progressive Products From Spears® Innovation & Technology***



**SPEARS® MANUFACTURING COMPANY**  
15853 Olden St, Sylmar, CA 91342 • PO Box 9203, Sylmar, CA 91392  
(818) 364-1611 • [www.spearsmfg.com](http://www.spearsmfg.com)

