

Technical Data Sheet

Sections

3 01 30
Joint & Crack Repair & Maintenance
7 92 16
Rapid Setting Rigid Joint Sealant

POLY-STRONG[™] PS-80

ADVANCED SEMI-RIGID, RAPID SETTING, POLYUREA JOINT FILLER DESIGNED FOR RETAIL AND WAREHOUSE CONCRETE FLOORS

Description

A new generation of polyurea technology, Poly-Strong™ PS-80 is a two component, 100% solids, rapid setting polymer liquid joint filler system that has a significantly faster set time and extended shave time. When cured, it produces a semi-rigid, rubber-like material that protects joints and edges from heavy loads and wheeled traffic. Designed for industrial concrete applications such as exposed concrete floors, warehouse floors and retail floors. Tough and flexible, Poly-Strong™ PS-80 reduces spalling, chipping, deterioration and cracks in joints with a hardness Shore A 80-81 level.

Solids

100%

Available Colors

Cool Gray Neutral Gray Warm Gray

Sizes

600ml Dual Cartridge*

Surfaces

Interior use only. Concrete floors, concrete, exposed concrete, warehouses, retail floors, crack repair in old floors, freezer floors, industrial and commercial floors.

* Includes static mixer tip

11

855-573-8383

HARDNESS / TENSILE STRENGTH / TENSILE ELONGATION



Average Percentage Improvement vs. Control

KreteTek Industries Inc. 66 River Road Hudson, NH 03051



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TECHNOLOGY // ADVANTAGES

- Fast Setting Reduces downtime
- Extended Shave Time for Greater Flexibility
- Moisture / Color Fade Resistant
- USDA/FDA/CFIA/LEED v4.1 Approval PS-80 is acceptable for use in USDA, FDA, and CFIA regulated facilities. PS-80 contains no VOC's and is fully compliant with USGBC LEED v4.1 green building standards.
- Revolutionary New Chemistry Provides superior substrate adhesion, moisture tolerance and a better finished profile compared to similar polyurea joint fillers.
- Finishes Flusher with the Floor Surface PS-80's chemistry permits for a wide shave window (15 min. to 30 hrs.) in which the installer can razor off overfill and achieve a consistently flush profile with floor surface.
- Moisture Tolerant PS-80 will not react with moisture and its special adhesion enhancers permit adhesion to damp substrates with minimal compromise as compared to dry substrates.
- **Colorfast** PS-80 maintains a consistent color profile and resists fading or discoloration under normal conditions.
- Ideal for Use in Stained/Polished Concrete Floors -PS-80 can be ground and polished as early as 30 minutes (wet) and 3 to 4 hours (dry).

TECHNICAL PROPERTIES

HARDNESS, SHORE A @ 70°F TENSILE STRENGTH TENSILE ELONGATION VISCOSITY (PART A) VISCOSITY (PART B) TACK FREE @ 70°F GEL TIME @ 70°F TRAFFIC READY @ 70°F	Test Method D-2240 D-638 D-638 - - - - - -	Results 80-81 505 psi 152% 1535 cP 2500 cP 3 minutes 35 seconds 1 hour 1:1
MIX RATIO (BY VOL.)		1:1

Approx Coverage Chart

Joint Size (US)	LF/Gal.	Joint Size (Metric)	M/Gal.
1/8″ x 1.5″	100	3 x 38	30
1/8″ x 1.75″	85	3 x 44	26
1/8″ x 2″	75	3 x 50	23
3/16" x 0.75"	135	5 x 19	41
3/16" x 1"	100	5 x 25	30
3/16" x 1-25"	85	5 x 31	26
3/16" x 1.5"	70	5 x 38	21
3/16" x 1.75"	60	5 x 44	18
3/16" x 2"	50	5 x 50	15
1/4″ x 1″	80	6 x 25	24
1/4″ x 1.25″	60	6 x 31	18
1/4″ x 1.5″	50	6 x 44	14
1/4″ x 1.75″	45	6 x 50	12
1/4″ x 2″	40	9 x 25	15



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TESTING DATA

Meets the Following ASTM Test Methods:

ASTM D-2240

Standard Test Method for Hardness of Rubber Property - Hardness Active Standard

ASTM D-638 Standard Test Method for Tensile Properties of Plastics

ASTM D 3912

Standard Test Methods for Chemical Resistance of Coatings and Linings for Use in Nuclear Power Plants

In Accordances with ASTM D-3912, Poly-Strong PS-80 Provides Chemical Resistance Against:

Acetic Acid, Acetone, Ammonium Hydroxide, Brake Fluid, Diesel Fuel, Gasoline / Unleaded, Hexane, Hot Tub Water, brominated, Hydraulic Fluid, Hydraulic Oil, Hydrochloric Acid, Jet Fuel, Methanol, 5% Methanol/Gasoline, 2-Methylbutane, Motor Oil, MTBE, 5% MTBE/Gasoline, Phosphoric Acid, Potassium, Hydroxide, Propolene Carbonate, Sodium Hydroxide, Sulfuric Acid, Toluene, Vinegar (5% acetic acid), and Water

To request the full chemical stability report, please contact us

Product Description

Composition

PS-80 is a two-part, 100% solids, rapid-setting polyurea polymer liquid system. When cured, PS-80 is a rubberlike solid with a hardness of Shore A 80-81.

Basic Use

PS-80 was developed to fill and protect joints in exposed concrete retail floors and in warehouse concrete floors. Its primary function is to protect joint edges from spalling under material handling vehicle traffic. PS-80 is intended for use where final operating temperatures are -20°F (-29°C) to 120°F (49°C).

Other Uses

PS-80 is also ideal for filling random cracks in exposed concrete retail floors and warehouse concrete floors.

Limitations

PS-80 is not recommended for use under VCT or other non-breathable flooring systems. PS-80 is designed for interior use and may not be suitable for outdoor applications due to thermal movement.

Correct Joint Design/Installation

PS-80 should be installed full joint depth in saw-cut contraction/control joints (or 2" minimum in saw-cut joints exceeding 2" in depth) per PCA and ACI guidelines.



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APPLICATION

Applicable Specifications

There are no government or ASTM standards for semi-rigid joint fillers. PS-80 meets or exceeds the criteria outline in the following industry standards:

American Concrete Institute (ACI) Guides/Specifications: 301-16, 302.1-R15, 310-R13, 360R-10 Portland Cement Association (PCA): Concrete Floors on Ground, Third Edition 2008.

Specifications

PS-80 is exclusively for use in filling or maintaining contraction/control and construction joints in cast-in-place concrete floors. It is not an elastomeric sealant, and if referenced in the 079000 section it should only be specified under **079216 Rigid Joint Sealants**. Ideally the product should be specified in **030130 Maintenance of Cast-In-Place Concrete** or **030130.71 Rehabilitation of Cast-In-Place Concrete**.

Installation

Additional instructions can be found by visiting Ghostshield.com or calling your Ghostshield Representative. PS-80 must be dispensed with dual-feed power dispensing equipment or with pre-filled, dual-dispense cartridge kits. Manual dispensing is impractical due to short working life (35 second gel time).

When to Install

The installation of PS-80 should be deferred as long as possible after slab placement, and should not be installed prior to 28 days to ensure adequate adhesion. ACI recommends a slab cure of 60-90 days or

longer, to permit for greater concrete shrinkage/joint opening, lessening the expected incidence of joint filler separation. Ambient areas should be stabilized at final operating temperature prior to installation. Refrigerated/frozen goods areas stabilized and held for an additional 7-14 days, or longer if possible.

Joint Preparation

Joints should be completely free of saw laitance, dirt, debris, coatings/sealers, frost or visible moisture. Joint cleaning procedures must accomplish the removal of all of the above. Failure to do so will compromise adhesion. Simply "raking" debris out of joint is not an acceptable cleaning method. Preferred method of joint cleaning includes using a dustless concrete saw with diamond blade (ensure blade is slightly wider than joint or clean both sides). No primer is needed. If unusual conditions are present, contact Ghostshield.

Choking off the base of the joint is not required due to PS-80's rapid set. Do not use compressible backer rod (Ethafoam, etc) in saw-cut joints less than 2" deep.

Prior to Dispensing

Thoroughly read SDS and complete installation instructions prior to opening containers or attempting to dispense. If installing in cooler temperatures, material should be maintained at a minimum temperature of 70°F (23°C) for best results. In warmer temperatures, cooling of product may be necessary.



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APPLICATION

Dispensing

Joints can be filled in one or two passes, depending upon joint depth and dispensing tip used. Preferred method is to fill from bottom to top using a dispensing tip that fits into the joint. Take care not to entrap air bubbles. Slightly overfill the joint, leaving a crowned profile, and allow to cure. If using two pass method, second pass should be done within 4 hours.

Finishing

The crown may be easily razored off as early as 15 minutes after placement, depending upon temperature. We recommend testing various shave times to find the optimal shave, which results in a filler profile that is flush with the floor's surface and free of any film from material overfill. If shave time is substantially delayed or if temperatures are low, PS-80 shaving process may be more labored. Should filler cure below the floor surface (due to settlement into the void at base of joint, etc.), remove top 1/2" of filler and re-apply PS-80. Dry grinding / polishing operations should be deferred for 3-4 hours minimum, after placement. Wet grinding/polishing operations should be deferred for 1/2 hour minimum, after placement.

Cleanup

Spills of unmixed components can be cleaned up with solvent (MEK, denatured alcohol, etc) or scraped/shaved off floor and tools if cured.

Use in Ground/Polished Concrete Floors

When sequencing product installation as part of a concrete grinding/ polishing process, installation can be done prior to grinding/honing if the first tool used is to be 40 grit or higher. Installation can also be deferred until prior to the last metal or transitional tooling step. The earliest the installed filler should be subjected to honing is 30 minutes if using a wet process, 3-4 hours if using a dry process (at 70 F).

Note: Some higher grit polishing operations can generate sufficient heat to melt or smear joint fillers, depending upon equipment and job conditions. If melting or smearing is detected, stop operations and test potential methods of reducing slab surface heat, including misting joints with water, altering the speed of polishing operations, re-shaving the joint filler or changing tooling. Please contact our technical service department for more information or assistance.

Maintenance

Once cured, PS-80 is basically maintenance free. If joints should open after installation, fill voids with additional PS-80.

Warranty

KreteTek Industries Inc. warrants our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommenced herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. No warranty is made, expressed or implied, regarding such other information, the data on which it is based or the results you will obtain from its use. We shall



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have no liability for incidental or consequential damages, direct or indirect. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products.

Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized tomake any representation or warranty or assume any other liability on our behalf with any sales of our products. Our products contain chemicals that may cause serious physical injury. Before using, read the Safety Data Sheet and follow the precautions to prevent bodily harm.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advise are based on KreteTek Industries Inc. present knowledge and experience. However, KreteTek Industries Inc. assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. KreteTek Industries Inc. reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.

For professional use only. Last revised 6/21

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www.Ghostshield.com

Customer Service and Technical Support 1-855-KreteTek (1-855-573-8383)