



IPATHANE HYDROPHILIC GROUT

Polyurethane Chemical Injection Resin



QUALITY PRODUCTS FOR THE CONCRETE /MASONRY REPAIR INDUSTRY

Description

Ipathane Hydrophilic grout is a V.O.C. compliant, nonflammable polyurethane injection resin formulated to seal dynamic non-structural cracks in concrete and prevent water migration. Once in contact with water, it expands and cures to a closed-cell, flexible foam.

Where to Use

Ipathane Hydrophilic Grout is ideal for sealing leaks through concrete cracks and joints. With the use of an open cell backer rod, sealing joints has never been easier. Can seal cracks and joints for potable water and storage tanks.

Advantages

- ◆ Made in America
- ◆ Quick Expansion
- ◆ Non-corrosive, Non-flammable
- ◆ Withstands varying thermal cycles and movements
- ◆ Can be used in single or plural component injection pumps
- ◆ Ideal for saturating open cell or oil-free oakum for expansion joints

Packaging

5 gallon pail
Ipathane Hydrophilic Grout is sensitive to moisture and moderately sensitive to high storage temperatures. It is recommended that the material be stored at temperatures between 41°F—60°F and in dry conditions. Maximum storage temperature should not exceed 80°F. Once a container has been opened, the material should be used as quickly as possible as the useful life of the material is greatly reduced.

Technical Data

Uncured:	Density	8.7-9.2 lbs/gal.	ASTM D-3574-95
	Solids	83%	ASTM D-2369 (Method B)
	Viscosity	50-800 cps	ASTM D-2196 (Method A)
	Flashpoint	225°F	ASTM D 93
	Color	Pale Yellow	
	Reaction Time 1:1 with water = 20 sec @ 68°F		
	Non-corrosive		
Cured:	Elongation	400%	ASTM D 3574-95
	Tensile Strength	380 psi	ASTM D 3574-95
	Shrinkage	<10%	ASTM D 1042
	Bonding Strength	250-300 psi	
	Toxicity Non-Toxic		

Caution:

Water used to activate IPATHANE HYDROPHILIC GROUT must be in a pH range of 3 –10 for proper cross-linking of the materials and optimum foam quality.

Surface Prep

The surface of the cracks need to be clean for identification. Wire brush crack surface to remove mineral deposits and dirt. If the cracks are wide or high water flow is present, first seal the surface with appropriate material. Ex. open cell soaked (with Ipathane H.G.) backer rod or Octoplug plus water plug. Application will dictate whether the surface seal is performed before our after injection holes are drilled.

IPA SYSTEMS, INC

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Mixing

Shake container to agitate material before use.

Application

Mark port spacing (Calculate port distance from crack): Unlike epoxies, polyurethanes are injected at an angle to intersect the crack at its midpoint, allowing for a complete seal. To intersect a crack at its mid-point, drill at a 45 degree angle at a distance of one half the thickness of the wall. ex. 12 inch thick wall = drill holes 6 inches from crack.

Drilling of injection holes: The standard drill hole will be 1/2 inch or 5/8 inch in diameter, proportional to the packer being used. • Drill at a 45 degree angle, alternating sides, as described above. Flush drill holes with water to remove dust and debris before inserting packer. This will insure that the crack is wet enough to react with the grout when it is injected into the crack.

Install injection ports or packers: Place the selected packer in the drilled 1/2 inch or 5/8 inch diameter hole so that the top of the sleeve is just below the concrete surface. • Tighten by a ratchet, socket or open-end wrench by turning clockwise until firm and secure.

Prepare injection equipment and re-inject packers with water.

Injection of grout: Begin the injection at the lowest packer installed on a vertical crack, or at the first packer flushed for a horizontal crack. During injection, you will notice that the Ipathane Hydrophilic Grout displaces water from the crack. Continue injecting until the grout appears at the adjacent packer hole. Stop pumping and reinstall the packer in the adjacent hole, tighten and begin injecting on it. • Continue this process until 3–4 packers have been grouted. Disconnect and go back to the first packer and inject all the ports for the second time. Some of the ports may take additional grout and further densify the material in the crack. Continue this process until the length of the prepared crack is injected. Injection pressure will vary from 200 psi to 2500 psi depending on the width of the crack, thickness of concrete and condition of concrete.

Surface Cleaning and repair: Use scraper to remove partially cured resin from the surface. Fully cured resin can be removed through mechanical methods including grinding. Let grout fully cure inside injected areas. Cut packers flush with surface or remove packers completely. Repair surface with appropriate material.

Limitations

- ◆ Low temperature will significantly affect viscosity.
- ◆ To minimize this effect, store product at normal room temperatures for a minimum of 24 hours prior to use.
- ◆ If site temp. is low, heat bands can be utilized to maintain product temperature.
- ◆ Lower viscosity improves penetration.
- ◆ Do not exceed 80°F when warming.

Clean-up

Ipathane Hydrophilic Grout should be removed from all application equipment immediately after use due to its high risk of moisture contamination.

Caution

Ipathane Hydrophilic grout should be used in well ventilated areas. Avoid eye and skin contact.

Warranty

This product is warranted and guaranteed to be of good quality. Manufacturer, as its sole and exclusive liability hereunder, will replace material if proved defective. This warranty and guarantee are expressly in lieu of all others, express or implied, including any implied warranty of merchantability or fitness for a particular purpose and may not be extended by representatives or any persons, written sales information, or drawing in any manner whatsoever. While the manufacturer recommends uses for the product based on tests believed reliable, no warranties, express or implied, or guarantee can be given as to particular methods of use or application, nor can performance be warranted, expressly or impliedly, or guaranteed under special conditions. Distributors, salesperson or company representatives are not authorized to extend or vary any warranties or guarantees beyond those outlined herein nor may the manufacturer's or seller's limitation of liability be waived or altered in any manner whatsoever.

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