



Polyurethane Injection Foam

General Description

Hydrophobic polyurethane liquid is designed to stop water infiltration or exfiltration. When the polyurethane comes into contact with water, it reacts with it and then repels any excess moisture, forming a closed-cell foam barrier that prevents water from passing through. It adheres tenaciously to almost all substrates, whether wet or dry. Polyurethane injection foam is commonly used to stop water leaks in poured concrete foundation walls, concrete pools, ponds, and other water-retaining structures. It is also effective for sealing cracked or honeycombed concrete, voids between walls and floors, walls and ceilings, expansion joints, cold joints, and pipe intrusions. This method is used to repair leaking concrete walls, ceilings, and floors, as well as in infrastructure such as tunnels, manholes, sewer lines, concrete dams, and parking decks. Polyurethane injection foam is ideal when greater than 20% movement (expansion and contraction) of the substrate is expected, or when epoxy injection is not suitable.

Physical Properties After Cure of Fourteen Days @ 75°F at 50% R.H.

Test Type	Results	Test Method
Density (core)	Free Rise 2.02 lbs/ft	ASTM D-1622
Low Temperature		ASTM D-2162
Aging (-20f) (shrinkage)	< 4%	1 Day
(shrinkage)	< 4%	7 Days
Water Absorption (volumn confined)	< 1%	ASTM D-2127
Shear Strength	34 psi	ASTM C-273
Tensile Strength	150 psi	ASTM D-1623
Elongation	275%	ASTM D-1623
Viscosity	100-200 cps	
% Solid	100	
Color	Amber	
TDI Content	0%	

Package

Polyurethane Injection Foam is furnished in various packages. Most typically, 21+ ounce dual cartridges or in 5-gallon pails. The use of cartridges is suitable for low-pressure injection with manual tools, or up to 250 psi dispensing, utilizing pneumatic dispensing tools.

Quantity To Use

It is difficult to determine the amount of material to adequately seal a given crack. Experience in home foundation cracks (8' long with a wall thickness of 8-10") suggest the usage of 10-21 ounces of RadonSeal 102 per 8' crack (versus an average of 30-50 ounces of epoxy). Thus, while polyurethane liquid can theoretically foam to 20 times its volume, more typical is 6-10 times its un-foamed volume for small cracks (1/32" - 1/4") as often found in foundation cracks.

Warranty

Recommendations concerning the performance or use of this product are based upon independent test reports believed to be reliable. If the product is proven to be defective, at the option of the Manufacturer, it will be either replaced or the purchase price refunded. The Manufacturer will not be liable in excess of the purchase price. The user will be responsible for deciding if the product is suitable for his application and will assume all risk associated with the use of the product. This warranty is in lieu of any other warranty expressed or implied, including but not limited to an implied warranty of merchantability or an implied warranty of fitness for a particular use.



Epoxy Surface Seal/Adhesive

General Description

RadonSeal Surface Seal/Adhesive is a high modulus epoxy gel designed to anchor dowel and tie bars into concrete pavement. It can be used for bonding miscellaneous materials to concrete and is also ideal for surface sealing of cracks prior to injection. Injection ready in approximately 1 hour (cure time varies with ambient temperature).

Uses

- Surface sealing.
- Setting parking bumpers.
- Anchoring dowel and tie bars into concrete pavement.

Areas of Application

As with any epoxy adhesive, surface preparation is critical. Concrete surfaces should be cleaned by sandblasting, water blasting or other mechanical means. All loose or unsound material must be removed. If patching, the outer perimeter of the spall should be saw cut or chipped to near vertical. Surfaces should be dry and dust free to insure a superior bond.

RadonSeal Surface Seal/Adhesive will cure in the presence of moisture although application onto wet surfaces is not recommended.

Safety Precautions

This product can cause skin irritation. Always wear protective clothing. Wash contaminated area with soap and water, never solvent. In case of eye contact, flush with water for 15 minutes; immediately see a physician.

Technical Data

Properties	Part A	Part B	Mixed
Solids by Volume	100%	100%	--
Color	White	Black	Grey
Shelf Life	2 years	2 years	--
Weight by Gallon	9.9 - 10.1 lbs	9.9 - 10.1 lbs	9.9 - 10.1 lbs
Mix Ratio (Vol)	--	--	1:1
Pot Life: (3 oz)	--	--	10 - 15 mins
Gel Time (5 mil)	--	--	Aprox. 1 hour



Technical Data

Properties	Part A	Part B	Mixed
Final Cure	--	--	1-3 days
Viscosity	--	--	Non sag gel
Hardness (Shore)	--	--	80-D
Ultimate Pull Out Strength	--	--	18,000 lbs

Physical Properties

Tensile Strength	ASTM D-638	6,000 psi
Tensile Elongation	ASTM D-638	3-4%
Compressive Strength	ASTM D-695	13,500 psi
Bond Strength	ASTM D-321	2,400 psi
Flexural Strength	ASTM D-790	8,000 psi
Deflection temp	ASTM D-648	190 °F

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**Blow Hole Repair (Syringe)****General Description**

The RadonSeal Blow Hile Repair Syringe is designated for use as a blow hole repair material, following the application of RadonSeal Surface Seal material. It has outstanding cured strength and is not recommended when removal is required.

Technical Data

	Prepolymer	Curative	Mixed
Viscosity (cps)	15,000	20-40,000	--
Ratio by weight	1.08	1.00	--
Ratio by volume	1	1	--
Color	White	Grey	--
Nominal working time	--	--	5-8 minutes
Nominal injection time	--	--	10-20 minutes

Clean Up

In general, should be a moisture-free solvent. Most effective is methylene chloride, followed by MIBK. If above is not acceptable, use less efficient solvents such as mineral spirits or DOP.

Warranty

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