

Single Component Waterproofing Injection Material

Component of GTI-R Waterproofing System

PRODUCT DATA: Injection Waterproofing 3-201.45

Description

Turbo-Seal R is a single component, highly elastomeric polymer rubber infused with special adhesives. Turbo-Seal R is used to repair water leaks in structures. Due to its superior flexibility, adhesiveness and self sealing characteristics, Turbo-Seal R is ideally suited for repairing and restoring damaged waterproofing membrane systems. Turbo-Seal R is applied by rotor/stator injection pump.

Uses

Turbo-Seal R is applied in any horizontal injection application. Turbo-Seal R can be applied to areas experiencing high volume active water leakage or minimal water leakage. Preventative sealing is also applicable. Suitable applications include the following types of structures:

Tunnels
Underground Garages
Expansion joints
Planters
Plaza Decks

Areas of application include:

Shrinkage Cracks
Moving Joints
Pipe Penetrations
Settlement Cracks
Construction Joints
Joints in Precast Concrete
Segments
Expansion Joints

Turbo-Seal R is injected into leaking areas after drilling to the damaged waterproofing layer, restoring its integrity.

Features	Benefits	
Adhesive in damp conditions, active water leaks, and on surfaces with foreign materials	Ease of application and effectiveness.	
Partial bentonite composition	Seeks out leaks and stops them.	
Remains as a flexible gel. Durable to vibration and continuous movement.	Waterproofing is maintained. No loss of adhesion or separation.	
One component. No mixing of chemicals, easy to apply, safe, easily stored and transported.	Cost-effective, reduce labor, save time, fewer mistakes in application.	
High solids content, solvent free, made from recycled materials.	Non-toxic, non-flamable. Safe application.	
Durable. Chemically resistant, resistant to freeze/thaw cycling, dry/wet cycling.	Effective in many different types of environments.	

Packaging

Turbo-Seal R is packaged in 20L (5.3 gallon) buckets.

Yield

2.25 ft²/gallon at 17/25cm wet thickness 4.00 ft²/gallon at 5/13cm wet thickness

Coverage may vary with the application technique used. Actual coverage and thickness used depends on the size of the void behind the structure and the porosity of the structure.

Transportation

Turbo-Seal R is classified as a DOT non-hazardous material.

Shelf Life

Indefinite, when stored according to recommended storage guidelines.

Storage

Store in unopened containers in clean, dry conditions at 40 to 80 ° F.

Technical Data Composition

Turbo-Seal R is a polymer rubber infused with special adhesives. Review MSDS for composition.

Testing

ASTM D1353-03 ASTM D56-05 ASTM D2196-99 KS F 4935

Typical Properties

PROPERTY	VALUE
рН	7.5 ~ 8.0
Specific Gravity	1.1 ~ 1.3
Softening	N/A
Physical State	Gel
Appearance	Black
Viscosity	150,000 cP*
	2,600,000cP**
Flash Point	> 200 ံ○ F

^{*}Pump/Application Mixed Condition

^{**}Static applied condition

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Test Data Turbo-Seal R

PROPERTY	RESULTS	TEST METHOD
Solids Content	75%	ASTM D1353
Flash Point	No observable flash point	ASTM D56
Viscosity	150,000 cP*; 2,600,000 cP**	ASTM D2196
рН	7.5 ~ 8.0	
Chemical Resistance		_
Sulfuric Acid	0.02g <1% weight	KS F 4935
Hydrochloric Acid	0.04g <1% weight	KS F 4935
Nitric Acid	0.03g <1% weight	KS F 4935
Sodium Chloride	0.04g <1% weight	KS F 4935
Alkali	0.03g <1% weight	KS F 4935
Adhesion to damp surfaces	Rating of 1, no permeability	KS F 4935
Structural Movement	No permeability	KS F 4935

Results shown are not intended as performance criteria for on-site installed material

How to Apply Turbo-Seal R

Equipment

Turbo-Seal R should be applied with a rotor stator pump.

For most applications, use an injection pipe with an outer diameter of 13/20cm.

A hammer drill will be sufficient for most applications.

Preparation

Check the thickness of the concrete. Drill 13/20cm diameter holes to the waterproofing layer at 3.25' intervals or next to cracks.

Install the injection packers. For most applications, an injection pipe with an outer diameter of 13/20cm and a packer are used to make an injection opening.

Injection

Inject **Turbo-Seal R** slowly at low pressure and continue injecting until counter flow from other drilled holes is seen. Remove the injection pipe from the drilled hole that **Turbo-Seal R** has counter flowed through. Fill the hole with non-woven cloth and non-shrink mortar. If multiple locations have been drilled, repeat process as necessary.

Some applications may require an initial application of polyurethane or other material to fill excessive voids.

Clean Up

Dab excess **Turbo-Seal R** off of the pump with a cloth. Additional cleaning can be done with a citrus based cleaner.

Health and Safety

Avoid contact with skin and eyes. Wear suitable gloves and safety glasses. See MSDS.

All Aspects Insulation Materials

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^{*}Pump/Application Mixed Condition **Static Applied Condition