Technical Datasheet

Prime Flex 900 XLV

Water-activated polyurethane injection resin

Description

Prime Flex 900 XLV is a low viscosity liquid resin that reacts with water and expands to form a closed cell, watertight foam. 900 XLV is used to seal actively leaking joints and cracks in concrete structures, particularly tight or hairline cracks. Material is typically injected under pressure through injection ports. This is a single-component, water-activated, hydrophilic, polyurethane injection resin.

Advantages

- Single-component; no catalyst or accelerators needed
- Pump material straight out of the pail
- Extremely tough and flexible. Can expand and contract parallel to the crack in varying temperatures.
- Up to 600% expansion (unconfined)
- Low viscosity will penetrate tight cracks

Applications

- Crack injection to seal leaks, particularly structures subject to movement or vibration.
- Curtain grouting manholes to seal cracks and penetrations
- Soil binding for slough control and sidewall support

Example structures and settings:

- Manholes, sanitary sewers
- Dams
- Underground concrete walls (foundations, car parks)
- Tunnels
- Lift service pits, utility vaults
- Water treatment tanks

Technical information

Properties will vary depending upon site conditions, application method, mixing method and equipment, material temperature, and curing conditions.

Typical Properties @ 23°C- Liquid	Results	Test Method
Viscosity	250-350 cps	ASTM D 1638
Solids content	88%	

Typical Properties - Cured	Results	Test Method
Tensile strength	3.10 MPa	ASTM D3574
Tensile elongation	350%	ASTM D3574
Tear resistance	0.00237 kN-m	ASTM D3574
Shrinkage	Less than 2%	ASTM D1042/ D756
Reaction Times @ 23°C based on 2:1 ratio of resin to water		
Initial reaction	30 seconds	
Full rise	1 minute, 50 seconds	

Mixing Ratio

Uses available water to initiate reaction. Inject as a single component or twin stream 2 parts resin to 1 or 2 parts water.

Application Instructions

Store material overnight to precondition to between 15 and 25°C prior to use. It is not necessary to pre-mix Prime 900 XLV prior to use.

Flush injection equipment with Prime Flex Eco Flush. Remove cured material by soaking in Prime Flex CGC (not appropriate for contact with plastic).

Packaging

Packaged under a dry nitrogen blanket

Pack sizes: 3.8 L (case of 4); 18.9 L

2:1 Quick Mix cartridges (case of 10) Tube A is 300ml,Tube B is 150ml

Single Shot cartridges 296 ml (case of 20)

Storage

Store in dry environment between 4-27°C. Do not allow product to freeze. Protect from moisture.

The shelf Life of Prime Prime Flex is 18 months from date of manufacture when stored correctly in unopened containers

Limitations

Cold temperatures will slow down reaction time and increase viscosity. pH below 3 or above 10 may adversely affect foam properties.

Health & Safety

Product Safety Data Sheets (SDS) are available from Nufins. SDS sheets are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the latest information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product.

Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Technical contacts are available to provide further information and arrange demonstrations.

Head Office: Kingston House, 3 Walton Road, Pattinson North, Washington, Tyne & Wear, UK

T: +44(0) 191 416 8360 F: +44(0) 191 415 5966 W: www.nufins.com E: info@usluk.com

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