

Prime Flex Hydro Gel SX

Hydrophilic, flexible polyurethane foam or gel

Description

Prime Flex Hydro Gel SX is a versatile, easy-to-use single-component, water-activated, hydrophilic polyurethane injection resin for sealing actively leaking joints and cracks in underground concrete structures. It forms either a closed cell, watertight foam or impermeable gel depending on the water to resin mix ratio. Cured material remains flexible and has excellent adhesion. It can also be used for soil binding for slough control.

Advantages

- Low to medium viscosity yields quicker reaction and superior mix, especially in cold water
- Forms flexible foam or gel with excellent adhesion
- Versatile and easy to use; seals tight or wide cracks
- High elongation allows for thermal or structural movement
- Can be used with oakum to seal wide gaps
- Non-flammable, non-corrosive
- Available in convenient cartridges. Quick Mix cartridge jump starts the reaction; ideal for cold water applications
- Can be used underwater

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
- Tanks
- Tunneling launch pits

Technical Information

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

Typical Properties - Liquid	Results	Test Method
Viscosity @ 21°C	300-450 cps (neat resin) 20 cps (8:1 water to resin)	ASTM D1638
Toxicity	Non-toxic in cured form	
Typical Properties - Cured	Results	Test Method
Tensile elongation	100-150%	ASTM D1564
Shrinkage	None when wet	

Reaction Times @ 21°C based on 8:1 ratio of resin to water	
Gel time	50-83 seconds

Mixing Ratio

Uses available water to initiate reaction. Inject as a single component or "twin stream" with water in the recommended range of 1:1 to 10:1 resin to water depending on the desired foam or gel consistency. Material goes from a foam to a gel at about 4:1.

Application Instructions

Store material overnight to precondition to between 15 and 25°C prior to use. It is not necessary to pre-mix Prime Flex Hydro Gel SX 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

Pack sizes: 18.9 L pail;
1:1 Quick Mix cartridges (case of 10, includes Gel Reinforcing Agent)
A and B tubes are 300 ml;
Single Shot cartridges (case of 20) contains 378 ml

Storage

Store in dry environment between 4-27°C. Shelf Life of Prime Flex Hydro Gel SX 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.