

Technical Datasheet

Prime Flex 900 MV



Water-activated polyurethane foam injection resin

Description

Prime Flex 900 MV is a medium viscosity, hydrophilic polyurethane resin that reacts with water and expands to form a closed cell, watertight foam. 900 MV is used to seal actively leaking joints and cracks in concrete structures. Material is typically injected under pressure through injection ports.

Primary Applications

- Water treatment tanks
- Dams
- Below-grade concrete walls
- Tunnels
- Manholes
- Elevator service pits

Packaging

- 5 gallon pail

Packaged under a dry nitrogen blanket.

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)
- Medium viscosity for wide cracks and joints

Technical information

Typical Data: Physical Properties at 73°F (23°C) - Liquid

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

Solids content: 93%

Viscosity: 650-700 centipoise

Note: Viscosity scale for Prime Resins products: 50 and under= super low, 51-100= very low, 101-400= low, and 401-1000= medium viscosity.

Typical Properties - Cured	Results	Test Method
Tensile strength	ASTM D-3574	440 psi
Tensile elongation	ASTM D-3574	410%
Shrinkage	ASTM D-1042/D-756	< 2%
Tear resistance	ASTM D-3574	86 lbs/inch

These properties were based on foam cured under pressure to simulate conditions inside a confined crack. Properties will vary

Reaction Times 73°F (23°C)	
Initial Reaction	30 seconds
Full Rise	1 minute 50 seconds
Full Cure	24 hours

Accessory Products

Eco Flush, oakum, injection ports, Prime Plug, injection pumps.

Directions For Use

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

Material Preparation

Store material overnight to precondition to 70-80°F (21-27°C) prior to use. It is not necessary to pre-mix Prime Flex 900MV prior to use.

Limitations

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

Storage & Clean Up

Storage

Store in dry environment between 40 and 80°F (4 and 27°C). Shelf Life: 18 months from date of manufacture in unopened containers properly stored.

Clean Up

Flush injection equipment with Prime Flex Eco Flush. Remove cured material by soaking in Prime Flex CGC (not appropriate for contact with plastic). Clean off of skin with soap and water.

Environmental Protection

Cured material is environmentally safe. Dispose of in according to appropriate regulations. Clean up any spilled catalyzed liquid material and add a small amount of water to cure unreacted material.

Shipping

Shipping Class: Motor Freight Class 60
Hazard Classification: Non-Hazardous

Health & Safety

Safety

See SDS for complete safety precautions prior to use. Use HSE-approved personal protective equipment (PPE), including safety glasses, gloves and confined space equipment/procedures if applicable. Avoid skin contact; do not ingest. For professional use only.

First Aid

Eye Contact: Immediately flush with large amounts of water. Seek medical attention.

Inhalation: Move to fresh air if symptoms occur. If breathing is difficult, seek medical attention.

Ingestion: Seek medical attention immediately.

Skin Contact: Wipe off contaminated area and wash with soap and water.

Manufacturing

Products are manufactured by Prime Resins, Inc. in the U.S.A. under strict quality assurance practices at our Conyers, GA plant.

Accessory Products

Eco Flush, oakum, injection ports, Prime Plug hydraulic cement, injection pumps

Warranty & Disclaimer

Prime Resins Inc., Nufins and USL (the Manufacturer) warrants their products to be free from manufacturing defects and that products meet the published characteristics when tested in accordance with ASTM and Prime Resins standards. No other warranties by the Manufacturer are expressed or implied, including no warranty of merchantability or fitness for a particular purpose. The Manufacturer will not be liable for damages of any sort resulting from any claimed breach of warranty since it has no control over how the products are used and applied. The Manufacturer's liability under this warranty is limited to replacement of material or refund of sales price of the material. There are no warranties on any product that has exceeded the "shelf life" or "expiration date" printed on the package label.