

Prime Flex 940

Water-activated injection resin yielding flexible polyurethane foam

Description

Prime Flex 940 is a thin liquid resin that reacts with water and expands to form a closed cell, watertight, flexible foam. 940 is used to seal actively leaking joints and cracks in concrete structures. Material is typically injected under pressure through injection ports. This hydrophobic, medium viscosity injection resin requires the use of Prime Kat or Kick Fast catalyst. This product is verified to meet NSF/ANSI Standard 61 for contact with potable water.

Primary Applications

- Pipe joints
- Box culverts
- Tunnels
- Storm sewers
- Retaining walls
- Seawalls
- Below-grade parking decks
- Earthen dams

Advantages

- NSF/ANSI 61 compliant for contact with drinking water
- Single-component
- Controllable set time
- Watertight
- Medium viscosity for good penetration

Packaging

- 45 lb. pail • 50 gallon drum • 300 gallon tote
- Required catalyst (Prime Kat or Kick Fast Kat): 66 oz unit or 5 gallon pail
- Cases (940, six Quick Mix 10:1 ratio cartridges with 10% Kick Fast catalyst and 6 static mixers)

Technical information: 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. 100% solids. Viscosity: 450-600 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

Physical Properties - Cured	Results	Test Method
Tensile strength	150 psi	ASTM D-3574
Tensile elongation	250%	ASTM D-3574
Shrinkage	None	ASTM D-1042 / D-756

Reaction times at 73°F (23°C) based on 2.5 ml water per ounce of resin				
Kat to 940 mix ratio ²	Kat to 940 mix quantities	Initial reaction time	Set time	Unconfined expansion ¹
10%	13 oz. to 1 gal.	17 sec.	38 sec.	28x
7.5%	10 oz. to 1 gal.	21 sec.	55 sec.	26x
5%	7 oz. to 1 gal.	29 sec.	81 sec.	21x
2.5%	3.5 oz. to 1 gal.	32 sec.	105 sec.	16x

¹ Unconfined expansion is tested in an open cup, without soil, and in laboratory conditions. Actual expansion when injected into soil or sand will vary depending on soil conditions (soil type, porosity, compaction, water pressure, etc.) as well as temperature, pressure, catalyst content, etc. Expansion in soil or sand is significantly less than unconfined expansion. ² Maximum mix ratio of Prime Kat to Prime Flex 940 is 10% by volume.

Technical Datasheet



Kick Fast catalyst (not recommended to use Kick Fast below 10%)

Kick Fast quantity by volume ²	Kick Fast to 940 quantities	Initial reaction time	Set time	Unconfined expansion ¹
10%	13 oz. to 1 gal.	11 sec.	26 sec.	30x

¹ Unconfined expansion is tested in an open cup, without soil, and in laboratory conditions. Actual expansion when injected into soil or sand will vary depending on soil conditions (soil type, porosity, compaction, water pressure, etc.) as well as temperature, pressure, catalyst content, etc. Expansion in soil or sand is significantly less than unconfined expansion. ² Maximum mix ratio of Prime Kat to Prime Flex 940 is 10% by volume.

Accessory Products

- Catalyst
- Eco Flush
- Injection ports
- Oakum
- Prime Plug
- Pumps

Directions For Use

Mixing Ratio: Use reaction times guide to determine amount of Prime Kat or Kick Fast catalyst to add to the 940. One 33 oz bottle per 5 gallons of 940 equals 5% mix ratio. Two 33 oz bottles is the maximum dose at 10%. Only mix the amount of material that can be used within 12 hours. Thoroughly mix materials using a low speed drill with a mixing paddle. Once catalyst has been added, the 940 will react upon contact with moisture.

Material Preparation: Store material overnight to precondition to 70-80°F (21-27°C) prior to use. If using less than full pail, pre-mix material prior to adding Prime Kat.

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 (4.4-27°C). Shelf Life: 18 months from date of manufacture in unopened containers properly stored.

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

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: Use OSHA-approved personal protective equipment (PPE), including safety glasses, gloves and confined space equipment/procedures if applicable. Avoid skin contact; do not ingest. See SDS for complete safety precautions. 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.

Warranty & Disclaimer

Prime Resins, Inc. warrants its 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 Prime Resins, Inc. are expressed or implied, including no warranty of merchantability or fitness for a particular purpose. Prime Resins, Inc. will not be liable for damages of any sort resulting from any claimed breach of warranty. Prime Resins' 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.

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