

Technical Data Sheet PRIME FLEX™ 920 Hydrophobic polyurethane injection resin

DESCRIPTION

Prime Flex 920 is used to permeate and stabilize soils. This single-component, hydrophobic, super low viscosity polyurethane infuses the soil, filling small voids within the soil and consolidating particles, which significantly increases the soil's load-bearing capacity. The resin reacts with water and expands to form a closed cell, watertight, rigid foam. 920 can be used to seal wide gaps in concrete, including gushing leaks, where concrete is not subject to movement. Material requires the use of **Prime Kat** or **Kick Fast Kat** to adjust the reaction time and is typically injected under pressure through injection ports.

TYPICAL AREAS OF USE

Stabilizing soil under roadways, concrete slabs and behind walls. Examples:

- Roads and highways
- Seawalls and retaining walls
- Below-grade parking decks
- Sinkhole perimeters

Sealing leaks and wide gaps in concrete. Examples:

- Box culverts, tunnels (subway, water, utility, etc.)
- Manholes, sanitary and storm pipes/structures

ADVANTAGES

- Indepently tested; verified as NSF/ANSI Standard 61 compliant for potable water contact
- Super low viscosity: penetrates into fine areas
- Pumped as a single component
- Up to 2900% expansion (unconfined)
- · Variable reaction (set) times
- Watertight on gushing leaks

PHYSICAL PROPERTIES

73°F (23°C) - Liquid

Solids content 100%

Viscosity 110-130 centipoise

Cured

Tensile strength ASTM D-3574 41 p.s.i.
Tensile elongation ASTM D-3574 3.4%
Shrinkage ASTM D-1042 / D-756 none

Compressive strength (with fine sand) ASTM C-39 970 p.s.i.;139,680 p.s.f.

Properties will vary depending on application conditions.

Reaction times 73°F (23°c)

Prime Kat

Quantity by volume	2.0%	5%	7.5%	10%
Initial reaction	13 seconds	11 seconds	9 seconds	5 seconds
Full rise	2 min. 10 sec.	52 seconds	41 seconds	31 seconds

Kick Fast catalyst (not recommended to use Kick Fast below 5%)

Quantity by volume	5%	7.5%	10%
Initial reaction	< 5 seconds	< 5 seconds	< 5 seconds
Full rise	22 seconds	16 seconds	11 seconds

PACKAGING

5 gallon pails, 50 gallon drum, 300 gallon tote, 10:1 "Quick Mix" cartridge (case of 6 with Kick Fast catalyst)

MIX RATIO AND PROCEDURE

Use reaction times guide below to determine amount of Prime Kat or Kick Fast catalyst to add to the 920. One 33 oz. bottle per 5 gallons of 920 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. **Hand mixing will not be sufficient** and will result in underperforming material. Once catalyst has been added, the 920 will react upon contact with moisture.

MATERIAL PREPARATION

Store material overnight to precondition to between 70 and 80°F (21 and 27°C) prior to use. If using less than a 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.

ACCESSORY PRODUCTS

Prime Kat or Kick Fast Kat, Eco Flush, injection ports, oakum, Prime Plug, pumps

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).

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.

STORAGE

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

SHIPPING

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

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.

ENVIRONMENTAL PROTECTION

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

MANUFACTURING INFORMATION

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

NOTICE

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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