Technical Datasheet
Prime Flex 920

Hydrophobic polyurethane injection resin

Description
Prime Flex 920 is a single-component polyurethane injection resin used to seal gushing leaks, including wide gaps in concrete, where the structure is not subject to movement. This hydrophobic, low viscosity polyurethane reacts with water and expands to form a closed cell, watertight, rigid foam. Due to its low viscosity, 920 is also used for permeation grouting of loose soils to consolidate soil particles and increase the load-bearing capacity. (For high strength or large void filling, see Prime Flex 985.) This material requires the use of Prime Kat or Kick Fast Kat to adjust the reaction time from 4-13 seconds.

Primary Applications
Sealing leaks and wide gaps in concrete. Examples:
• Box culverts, tunnels (subway, water, utility, etc.)
• Manholes, sanitary and storm pipes/structures

Curtain grouting below grade structures. Examples:
• Parking decks
• Foundations and basements

Permeation grouting for soil stabilization. Examples:
• Roads and highways
• Seawalls and retaining walls
• Sinkhole perimeters (not filling the sinkhole—see 985)

Advantages
• Independently tested; verified as NSF/ANSI Standard 61 compliant for potable water contact
• Low viscosity: penetrates into fine areas
• Pumped as a single component
• Available in convenient cartridges
• Up to 2900% expansion (unconfined)
• Variable reaction (set) times
• Watertight on gushing leaks

Packaging
• 45 lb. pail
• 50 gallon drum
• 300 gallon tote
• 10:1 Quick Mix cartridge (case of 6 w/ Kick Fast catalyst). For Quick Mix, Tube “A” is 750 ml. Tube “B” (Kick Fast catalyst) is 75 ml.

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: 75-105 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

<table>
<thead>
<tr>
<th>Physical Properties - Cured</th>
<th>Results</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength</td>
<td>41 psi</td>
<td>ASTM D-1623</td>
</tr>
<tr>
<td>Tensile elongation</td>
<td>3.4%</td>
<td>ASTM D-1623</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>None</td>
<td>ASTM D-1042 / D-756</td>
</tr>
<tr>
<td>Compressive strength (with fine sand)</td>
<td>1027 psi; 147,888 psf</td>
<td>ASTM D-695</td>
</tr>
</tbody>
</table>

Reaction times at 73°F (23°C) based on 2.5 ml water per oz. of resin

<table>
<thead>
<tr>
<th>PRIME KAT Kat to 920 mix ratio</th>
<th>Kat to 920 mix quantities</th>
<th>Initial reaction time</th>
<th>Set time</th>
<th>Unconfined expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>13 oz. to 1 gal.</td>
<td>12 seconds</td>
<td>30 seconds</td>
<td>29x</td>
</tr>
<tr>
<td>7.5%</td>
<td>10 oz. to 1 gal.</td>
<td>12 seconds</td>
<td>47 seconds</td>
<td>28.5x</td>
</tr>
<tr>
<td>5%</td>
<td>7 oz. to 1 gal.</td>
<td>20 seconds</td>
<td>70 seconds</td>
<td>26.5x</td>
</tr>
<tr>
<td>3.5%</td>
<td>5 oz. to 1 gal.</td>
<td>30 seconds</td>
<td>80 seconds</td>
<td>23.5x</td>
</tr>
<tr>
<td>1%</td>
<td>1.5 oz. to 1 gal.</td>
<td>90 seconds</td>
<td>5 min. 30 sec.</td>
<td>13.5x</td>
</tr>
</tbody>
</table>
**Environmental Protection**
Cured material is environmentally safe. Dispose of in accordance 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 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. Wash with soap & water.

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

**Warranty & Disclaimer**
Prime Resins Inc. 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.