

Technical Datasheet

Prime Rez 1000 High Mod



High-strength epoxy injection resin

Description

Two-component, low viscosity, high-strength, high-modulus epoxy resin designed to be injected or gravity fed into cracks in concrete, masonry or stone for structural repair. May also be used as a general purpose epoxy adhesive. Conforms to ASTM C-881 type I, II, IV and V, grade 1, class B and C.

Primary Applications

- Concrete highways
- Pressure injection of cracks in concrete, masonry, stone and wood
- Gravity feed of cracks in horizontal surfaces
- Grouting of dowel bars, bolts, pins, etc.
- Concrete walls and floors
- Parking decks
- Dams
- Bridges
- Retaining walls
- Foundation walls

Advantages

- High compressive, bond, tensile and flexural strengths
- Low viscosity
- Good chemical resistance

Packaging

- 1-1/2 gallon
- 3 gallon units
- 15 gallon units
- 2:1 Quick Mix cartridges—case of 10

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.

Solids content: 100%

Viscosity: 250-350 centipoise

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

Color: Amber (clear)

Pot Life	100 Grams	1 Gallon	20 Mils
90°F (32°C)	10 min	3 min	1 hr 30 min
73°F (23°C)	24 min	19 min	6 hours
50°F (10°C)	40 min	33 min	7 hours

Test results		
Compressive strength	13,300	ASTM D-695
Compressive modulus of elasticity	293,000	ASTM D-695
Tensile strength	7,250	ASTM D-638
Tensile modulus of elasticity	425,000	ASTM D-638
Tensile elongation	1.7%	ASTM D-638
Bond strength (dry cure) - 2 day	3,380	ASTM C-882
Bond strength (dry cure) - 14 day	3,530	ASTM C-882

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Test results (cont.)		
Flexural strength	12,360 psi	ASTM D-790
Shore hardness	80-85 D	D scale
Heat deflection	116°F (47°C)	ASTM D-648
Water absorption	0.13%	ASTM D-570

Accessory Products

- Prime Gel 2000
- Prime Gel 2100
- Prime Gel 2500
- Injection ports

Directions For Use

Mixing Ratio: A:B 2:1 by volume

Manual Mixing: Pre-mix each component prior to combining. Only mix the amount of material that can be used within the pot life. Thoroughly mix materials using a low speed drill with a mixing paddle. Scrape the sides and bottom of the pail while mixing. Note: Larger batches exotherm and set up faster than small batches.

Pump Application: This product is ideally suited for use with a two-component injection pump or Quick Mix cartridge system.

Material Preparation: Store material overnight to precondition to 70-80°F (21-27°C) prior to use.

Limitations: Cold temperatures will slow down reaction time and increase viscosity. Do not use below 32°F (0°C) as ice crystals in the concrete will inhibit bond. Material that is off ratio or not mixed thoroughly will not cure to full strength and may remain tacky indefinitely.

Storage & Clean Up

Storage: Store in dry environment between 40 and 80°F (4 and 27°C). Do not allow to freeze. Shelf Life: 1 year from date of manufacture in unopened containers properly stored. Protect from moisture.

Clean Up: Clean off of skin with soap and water immediately.

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: ORM-D

Health & Safety

Safety: "B" component contains amines and may cause severe burns upon skin contact for any length of time. 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 immediately.

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.