

Prime Bond 3900 High Mod LPL

Long pot life, high-strength, multi-purpose epoxy bonding adhesive

Description

Prime Bond 3900 is a long pot life, low viscosity, high strength epoxy bonding agent for bonding new concrete to old concrete or mixing with dry sand to make a repair mortar. This two-component, 100% solids, amine cured epoxy adhesive conforms to ASTM C-881 Type I, II, IV and V, Grade 2, Class B and C.

Primary Applications

- Bonding new “plastic” concrete to existing concrete or steel
- Binder for epoxy repair mortar to patch, overlay horizontal surfaces

Advantages

- High compressive, bond, tensile and flexural strengths
- Moisture insensitive
- Good chemical resistance
- Conforms to ASTM C-881 Type I, II, IV and V, Grade 2, Class B and C

Packaging

- 3 gallon unit (MTO)
- Quart + pint unit (MTO)

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.

Viscosity: 3,200 cps

Color: Amber

Pot Life	100 grams	1 gallon	Tack free—20 mils
73°F (23°C)	2 hrs	56 min	6 hrs

Test results		
Compressive strength	10,530	ASTM D-695
Compressive modulus of elasticity	338,000	ASTM D-695
Tensile strength	7,200	ASTM D-638
Tensile modulus of elasticity	332,000	ASTM D-638
Tensile elongation	3%	ASTM D-638
Bond strength (dry cure) - 2 day	2,547	ASTM C-882
Bond strength (dry cure) - 14 day	2,833	ASTM C-882
Shore hardness	85D	D scale
Water absorption	0.9%	ASTM D-570

Technical Datasheet



Test results (cont.)	
Coverage	80 square feet per gallon at 20 mils
Coverage	.370 cubic feet per gallon when mixed with 3 parts by volume Prime Blend sand

Accessory Products

Prime Blend sand

Directions For Use

Mixing Ratio: A:B 2:1 by volume

Manual Mixing: Only mix the amount of material that can be used within the pot life. To prevent bubble formation, avoid introduction of air into mixed material by controlling drill speed and mixing method. 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 the Quick Mix cartridge system. 10 gallon units are packaged for use with extruder pump equipment.

Material Preparation: Store material overnight to precondition to 70-80°F (21- 27°C) prior to use. Pre-mix each component prior to combining. Failure to properly pre-mix will result in uncured or improperly cured material.

Bonding Requirements: Apply neat mixed material to surface by brush, roller or spray. Pour new concrete while material is still tacky. If it loses tackiness or cures for more than 24 hours before new concrete is poured, roughen surface by light brush or sanding followed by a solvent wipe before recoating with fresh material.

Limitations: Cold temperatures will slow down reaction time and increase viscosity. Do not use below 40°F (4°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 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 dispose of according to local, state and federal regulations.

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 manufactured by Prime Resins, Inc. in 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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