

EPOPRIME LP

LONG POT LIFE EPOXY ADHESIVE



EPOPRIME LP is a 100% reactive, 2 component material designed as a moisture insensitive adhesive and binder with extended working time for numerous application needs. This high modulus system is available in medium viscosity to provide a long pot life for applications which require long.

FEATURES & BENEFITS

- Moisture insensitive for bond to dry or damp surface.
- Bond fresh concrete toppings to hardened concrete slabs.
- Excellent adhesive for bonding concrete, steel, ceramic and wood materials.
- Designed for use at temperature above 21°C.
- Extended pot life for longer working time in warm weather and for large jobs.
- May be extended with sand or aggregate for mortar repairs.
- Protects concrete substrate against chemical attack including most acids.
- Adequate open life time in case of enencement in the concrete repair.

BASIC USES

- Coating
- Bonding Toppings
- General adhesive
- Anchoring

SPECIFICATIONS / COMPLIANCES

EPOPRIME LP meets the requirements of ASTM C 881-90, Types I, II, IV and V, Grade 2, Class B & C. It is suitable for use under ACI specifications 503.1, 503.2, 503.3 and 503.4. EPO PRIME LP meets all requirements of ASTM C 883 and ASTM, C 884.

TECHNICAL INFORMATION

Typical Engineering Data:

Typical properties of **EPOPRIME LP** when tested under laboratory conditions

Property	24°C	38°C
Viscosity	3,400 cps	1,300 cps
Pot Life (3.8 liter)	55 mins	14 mins

Working Time Applied over Concrete

	10 hrs.	6 hrs.
Shore D Hardness	82	84

Compressive Strength, ASTM C 695

1 day	35 MPa	100 MPa
3 days	55 MPa	124 MPa
7 days	69 MPa	138 MPa
28 days	83 MPa	152 MPa

Tensile Strength

ASTM D 638	21 MPa	55 MPa
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Tensile Elongation

ASTM D 638	1.0%	6.0%
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Flexural Strength

ASTM D 790	62 MPa	83 MPa
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Heat Deflection

ASTM D 648	58°C	67°C
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Bond Strength

ASTM D 882		
14 days	> 14 MPa	> 19 MPa

Shelf Life : 1 years in unopened container in warehouse conditions.

COVERAGE	Coverage Rates m ² /liter	Application Bonding Topping Coating Repair Mortar	EPOPRIME LP 4.5 - 9 10 - 12.5 1.6 - 2.0	Note: The coverage rate of this product is dependent upon the concrete surface texture, the temperature of the material and the concrete. For applications involving a repair mortar, the gradation of the aggregate and the workability desired greatly affects the amount of epoxy required.
PACKAGING	EPOPRIME LP is a two part system mixed Part A & Part B. The units are pre-portioned and packaged in 1 gallon units. EPOPRIME LP epoxy system is occasionally used as an anchoring material for dowel bars and anchor bolts. A repair mortar can be made with this product by adding aggregate. Size, gradation and amount of aggregate will be determined by the application. The user is advised to consider the use of a prepackaged mortar, such as CEMTEC EPOMORT 100 .			

DIRECTIONS FOR USE

Surface Preparation - concrete should have an open, porous and textured surface with all curing compounds and sealers removed. Old concrete must be clean and well textured. All oil, dirt, debris, paint and unsound concrete must be removed. The surface should be prepared mechanically using a scabber, bushhammer, shotblast, scarifier or similar equipment which will give a surface profile commensurate with the application. (Coating applications should have a light sandblast appearance while topping applications should have the surface of the concrete profiled to expose the large aggregate.) The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washer.

have the surface of the concrete profiled to expose the large aggregate.) The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washer. Acid etching is acceptable only when mechanical preparation is impractical. It is recommended that only contractors experienced in the acid etching process use this means of surface preparation. The salt of the reaction must be thoroughly washed away. Allow the concrete to completely dry.

Note

Even with proper procedures, an acid etched surface may not produce a bond as strong as produced by other preparation methods. Mix part A and part B (resin & hardener) for 3 minutes using a drill and mixing prop. For ease of mixing, add the part B to part A (not the reverse). The epoxy must be well mixed to ensure proper chemical reaction. If aggregate is to be added, the aggregate is mixed into the epoxy after the part A and part B have been premixed together. Place immediately.

Priming & Bonding

Use either low viscosity or medium viscosity formulations in these applications. Apply material by roller, squeegee or airless spray in a uniform fashion. Do not allow the material to puddle. Extremely porous surfaces may require a second coat for proper ultimate.

Apply material by roller, squeegee or airless spray in a uniform fashion. Do not allow the material to puddle. Extremely porous surfaces may require a second coat for ultimate performance. If **EPOPRIME LP** is used as a bonding agent for a cementitious topping, place the topping on the **EPOPRIME LP** while the epoxy is still wet. If the epoxy has become "tacky" to the point where it is no longer a sticky liquid, a fresh coat of **EPOPRIME LP** must be applied before the topping is placed.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

Sealing & Coating

If a second coat of **EPOPRIME LP** is to be placed on the concrete, the first coat should be slightly tacky (4-10 hours old) when the second coat is applied. A slip resistant surface can be created by broadcasting silica sand (20-50 mesh) into the coating and then backrolling to embed the sand.

Repair Mortars

The surface should be primed with **EPOPRIME LP** prior to application of the repair mortar. Mix the epoxy unit (Part A with Part B) prior to adding the aggregate. Trowel the mortar into place. If the surface is too rough, a topcoat of **EPOPRIME LP** can be applied.

CLEAN-UP

Clean tools and equipment with solvent such as **CEMTEC SOLVENT**, xylene, xylol, toluene or MEK. Do not allow the epoxy to harden on equipment.

PRECAUTIONS / LIMITATION

- This product may vary in colour and may yellow and chalk after prolonged exposure to sunlight.
- Epoxy components may cause irritation. Avoid contact with eyes and skin.
- Do not apply over hardened primer or old epoxy without proper surface preparation.
- Not recommended for use as surface sealer over new concrete less than 30 days old.
- Not recommended for use when base concrete is at a temperature under 4°C.
- Solvents are Flammable. Keep away from heat, sparks, open flame, or lighted cigarettes. Use explosion-proof application equipments.

"High Quality Construction Chemicals"

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The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product. CMCI reserves the right to amend the technical characteristics of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI, no warranty and/or responsibility is assumed on the performance of work completion executed with use of our products.