



# METCO LPL EPOXY

*Long Pot Life, 100% Solids Epoxy Bonding Agent*

## 1. Product Description

a. **Basic Use:** Metco LPL Epoxy is a 2-component, long pot life, 100% solids, moisture insensitive, high modulus epoxy bonding agent formulated to provide extended working time. Metco LPL Epoxy is used to bond fresh concrete to hardened concrete and old concrete to old concrete, and is designed to meet the requirements of ASTM C 881 specification, Types I, II & V, Grade 2 (medium viscosity). Metco LPL Epoxy is used in hot weather applications or where long open times are required.

### b. Features/Benefits:

- Long pot life permits application when temperatures are above 75°F (24°C).
- Contains no volatile solvents permitting interior application with virtually no fire hazard or toxic odors.
- Easy clean up with soap and water.
- Extended working times allow application over large areas without premature hardening.
- Excellent adhesive properties permit application to most sound surfaces with incredible adhesion including concrete, brick, block, metal and wood.
- Easily mixed in 2 to 1 ratios by volume.
- May be mixed with silica aggregate for anchor bolt, dowel and rebar grouting applications.
- May be used as a coating system to protect floors and other surfaces from chemical attack.
- Moisture insensitive system permits use over damp concrete surfaces.
- Medium viscosity allows for application on both horizontal and vertical surfaces.
- 100% solids epoxy system conforms to VOC regulations.
- Versatile formulation allows for use with silica aggregate as a repair mortar or floor overlayment.

c. **Typical Applications:** Bonding new concrete to old concrete, old concrete to old concrete, primer for Metalcrete flooring systems, grouting of dowels, anchor

bolts and reinforcing steel, sealing of dusting and porous surfaces.

d. **Limitations:** Metco LPL Epoxy should not be used as a structural adhesive when temperatures are above 170°F (77°C). Do not use as a coating or primer over concrete less than 30 days old. Do not apply when ambient and substrate temperatures are less than 65°F (18°C).

e. **Composition:** Metco LPL Epoxy is a 2-component, 100% solids, moisture insensitive, high-modulus epoxy.

f. **Color/Appearance:** After mixing, Metco LPL Epoxy is concrete gray.

## 2. Packaging

Metco LPL Epoxy is supplied in two standard units containing the proper proportions of liquid components. Standard packaging information is shown below:

<i>Unit Size</i>	<i>Binder</i>	<i>Activator</i>	<i>Shipping Wt.</i>
<i>1 gal. (3.8 liter)</i>	<i>2/3 gal. (2.5 liter)</i>	<i>1/3 gal. (1.3 liter)</i>	<i>10 lbs. (4.5 Kg)</i>
<i>3 gal. (11.4 liter)</i>	<i>2 gal. (7.6 liter)</i>	<i>1 gal. (3.8 liter)</i>	<i>30 lbs. (13.6 Kg)</i>

## 3. Estimating/Coverage

The recommended coverage rates per gal. (3.8 liter) are shown below:

<i>Sealer/Coating</i>	<i>Bonding Agent</i>
<i>150-200 sq. ft. (13.9-18.6 sq.m)</i>	<i>50-125 sq. ft. (4.6-11.6 sq. m)</i>

## 4. Technical Data

a. **Applicable Standards:** Metco LPL Epoxy conforms to the requirements of ASTM C 881, Type I, II & V, Grade 2.

b. **Compressive Strengths:** ASTM C 109, psi (MPa).

<i>Age</i>	<i>Metco LPL Epoxy</i>
<i>1 day</i>	<i>6,000 (41.4)</i>
<i>3 days</i>	<i>7,200 (49.7)</i>
<i>7 days</i>	<i>8,500 (58.6)</i>
<i>14 days</i>	<i>9,500 (65.5)</i>
<i>28 days</i>	<i>10,800 (74.5)</i>

c. Bond Strength: psi (MPa), ASTM C 882

<i>Age</i>	<i>Strength</i>
<i>3 days</i>	<i>2,300 (15.9)</i>
<i>7 days</i>	<i>3,600 (24.8)</i>
<i>28 days</i>	<i>4,100 (28.3)</i>

## 5. Directions for Use

a. **Preparation:** The surface to be coated with Metco LPL Epoxy must be physically and structurally sound, thoroughly clean, free of oil, curing compounds or other deleterious materials that may prevent adhesion. New concrete must be thoroughly cured for at least 28 days before starting surface preparation. New concrete should be acid-etched with Bitesin. Old or existing concrete should be acid-etched with Bitesin or mechanically roughened by shot blasting or scabbling. An exposed aggregate surface is required for good bonding. All loose particles must be removed by vacuuming or flushing with compressed air and water.

b. **Mixing:** Thorough blending of all components is essential. Use a power drill with a Metco Jiffy mixing paddle. First, mix the binder separately; then, mix the activator separately. Next, add the mixed activator to the mixed binder and thoroughly mix for at least two minutes at revolution speeds that will not entrap air bubbles into the freshly mixed Metco LPL epoxy bonding agent.

c. **Bonding:** After surface preparation is completed, use Metco LPL Epoxy to bond fresh concrete. Apply with squeegee, roller or airless sprayer. Place concrete topping before bond coat hardens.

d. **Sealing/Coating:** Apply Metco LPL Epoxy with a squeegee, roller or airless sprayer onto the prepared substrate. Two coats may be required to provide additional protection or insure uniformity.

e. **Horizontal Repairs and Floor Overlays:** Mix clean and dry silica aggregate with Metco LPL Epoxy to a mortar consistency and place onto properly prepared surface. Finish to desired thickness and texture. For very thin applications, place neat epoxy compound without aggregate.

f. **Dowel and Anchor Bolt Grouting:** Place Metco LPL Epoxy into clean and dry hole and then insert dowel, rebar or anchor bolt to proper embedment depth. Twist or rotate dowel, rebar or anchor bolt to insure complete coverage and consolidation.

g. **Skidproofing:** Anti-skid aggregate may be broadcasted into the fresh Metco LPL Epoxy coating while it is still tacky. Continue until an excess of aggregate remains standing on the surface. After the coating and aggregate have hardened, remove all excess aggregate by sweeping with a stiff broom. Apply an additional coat to thoroughly lock in place all aggregate and provide a uniform appearance.

h. **Clean-Up:** Either DL Solvent or Waterzall Concentrate and water may be used for cleaning tools and equipment.

i. **Working Time/Pot Life:** All mixed epoxy compounds should be applied immediately after mixing. Material will remain tacky on surface 2.5 hours after initial application at 85°F (29°C).

## 6. Availability

Metco LPL Epoxy is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

## 7. Warranty

Metco LPL Epoxy is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

## 8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



**Metalcrete Industries**

4133 Payne Avenue • Cleveland, Ohio 44103  
440-526-5600 • 800-526-5602 • FAX 440-526-5601