



## PENTOX 50™

Penetrating Epoxy Sealer

### MANUFACTURER

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### PRODUCT DESCRIPTION

**PENTOX 50** is a premeasured two-part, 100% reactive, penetrating epoxy for application to exposed concrete surfaces for positive protection from deicing salt, mild acids and oil staining. **PENTOX 50** is a pale, penetrating, fast drying, sprayable liquid.

**PENTOX 50** is a precision controlled two-part, high performance, penetrating epoxy barrier that offers the chemical inertness, toughness and bonding properties of high performance epoxy resins. It is recommended for parking structures, garages, maintenance shops, high traffic floor surfaces, bridge decks and mechanical rooms.

**Basic Use:** **PENTOX 50** is formulated with thermosetting resins of a low viscosity that deeply penetrate concrete and fill its surface pores. This product prevents penetration of moisture, deicing salts and possible chloride-ion contamination. **PENTOX 50** also protects concrete from efflorescence salts, mild acids, oils, fuels and other contaminant entry as well as freeze-thaw deterioration. **PENTOX 50** is recommended for bridge decks, parking ramps and garages, bus and truck garages, vehicle repair facilities, machine rooms, maintenance shops, and high traffic floors.

### ESTIMATING

**PENTOX 50** is a two component product. Equal quantities of both Component A and Component B must be ordered. **PENTOX 50** is available in 2-55-gallon (415-liter) and 2-5-gallon (38-liter) factory-sealed kits. Containers are identified with product name and batch code.

**Coverage Rates:** Surface porosity and texture determines coverage rate. Approximate rates:

|                               | ft <sup>2</sup> /gallon | m <sup>2</sup> /L |
|-------------------------------|-------------------------|-------------------|
| 1st coat, broom finished ..   | 200-300 .....           | 5-7.5             |
| 1st coat, steel troweled .... | 300-400 .....           | 7.5-10            |
| 2nd coat .....                | 400-500 .....           | 10-12             |

### TECHNICAL DATA

#### Applicable Standards:

ASTM-C 672, Deicing salt, scaling durability  
Applicable DOT standards  
Indiana DOT Std. Spec., Sec. 908.09 (B).  
VOC Compliant

### PENTOX 50 Typical Properties:

|                               |   |                     |
|-------------------------------|---|---------------------|
| Mix Ratio by volume           | - | 1:1                 |
| Solids Volume, % min.         | - | 50                  |
| Viscosity at 77°F/25°C        | - | 20-28 cps           |
| Pot Life, hours               | - | 30 minutes          |
| Tack-Free, hours              | - | 2-3                 |
| Open to Light Traffic         | - | 12-24 hours         |
| Final Cure                    | - | 7 days              |
| ASTM-C 672 - 50 cycles        | - | 0                   |
| Shelf life, sealed containers | - | 1 year              |
| Color                         | - | Light Amber or Gray |
| VOC                           | - | <400 gr/liter       |

### INSTALLATION

**Surface Preparation:** Concrete surfaces must be structurally sound, clean, oil-free and as dry as possible. On parking decks and bridge decks, concrete should be broom finished or swirl floated and free of curing compounds and other materials that prevent **PENTOX 50** penetration.

**Old Concrete:** Remove existing coatings, oils, greases, dirt and other contaminants from surface. Mechanically remove contaminants, heavy laitance or protrusions which will interfere with the uniform penetration of **PENTOX 50**. Remove and repair unsound patches, fill holes, cracks and deteriorated areas.

**New Concrete:** Allow concrete to cure a minimum of 28 days before application. Mechanically remove surface laitance, curing compounds, sealers or other contaminants.

**Mixing:** Stir each component separately until evenly mixed. Add equal parts of Component B to Component A. Mix at slow speed (200-300 rpm) until thoroughly mixed, a minimum of 5 minutes. Allow mixed product to stand for a few minutes (3) before applying and place mixed product in flat pans to reduce exothermic heat build-up and flash set. Do not thin.

**Application:** Uniformly apply directly to the clean, dry, porous concrete surface by airless spray, roller or brush at the rates specified. After the first coat dries (4-24 hours), apply the second coat at specified rate. Do not puddle.

**Clean-up:** Clean equipment after use immediately with MEK, lacquer thinner or warm soap/water.

### FOR BEST RESULTS:

**PENTOX 50** is designed for placement between 50°F and 90°F (10°C and 32°C). Apply only to frost-free, dry, oil-free and thoroughly cleaned surfaces. Concrete must be a minimum of 28 days old. Not recommended for architectural concrete. **PENTOX 50** yellows upon exposure to sunlight. **PENTOX 50** becomes a vapor

barrier after cure. Do not thin. Avoid usage where danger exists that spillage of strong chemicals may occur.

Periodic reapplications are recommended for continued long-term protection to concrete surfaces.

## **PRECAUTIONS**

Unmixed components are flammable and corrosive. Wear protective gloves, goggles and clothing when handling epoxy resins. Prolonged exposure may cause skin irritation, dermatitis or other allergic responses. Cornea damage can occur from eye contact. Mix well in ventilated area. Do not breath excessive fumes. Do not apply near HVAC intake vents.

**Flammable:** Keep away from heat or open flame.

Please refer to the material safety data sheet (MSDS) for more detailed information.

## **STORAGE/SHELF LIFE**

**PENTOX 50** containers are to be kept tightly sealed and stored at 50°-95° F (10°-35° C). Condition material at 50°-70°F for 24 hours prior to use. Shelf life in original, unopened container is one year when properly stored.

## **FAX ON DEMAND/WEBSITE**

L&M's exclusive Fax On Demand and its convenient internet website offer instant access to Technical Data Sheets, Material Safety Data Sheets, product updates, and other useful information. Simply dial 800-839-9887 or visit [www.lmcc.com](http://www.lmcc.com) and follow the easy steps.

## **LIMITED WARRANTY**

Contact L&M for available five and ten year performance warranty, which requires the use of an approved L&M installer.

*This product is warranted to be free of defects in material and workmanship, and conform to L&M Construction Chemicals ("L&M") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose. Satisfactory results depend upon many factors beyond L&M's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product. L&M shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. L&M's sole responsibility shall be to replace that portion of the product which proves to be defective. Any warranty claim must be made within six (6) months from the date of the claimed breach. This limited warranty applies only if the product was properly installed and used according to all instructions and was properly stored prior to use.*

**For Professional Use Only.**

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