

Product Data Sheet

Product Description / Application

ICO Lastic OH is a specially formulated, three-part concrete repair material especially suited for repairing the underside of spalled bridge decks and vertical columns subjected to flexing. As an epoxy/urethane polymer hybrid material, it combines the flexibility of urethane (about 100% elongation) with the excellent damp, as well as dry adhesion of epoxies. Using a special filler, **ICO Lastic OH** can be applied in a single overhead or vertical application up to 6" thick per pass. Such repairs have been in place for over five years in salt environments with bridge deflections up to two feet without any failure.

ICO Lastic OH is an odorless, non-toxic material that is very user friendly for DOT maintenance crews. It can be applied down to 40°F, but because of workability issues, we recommend application temperatures be kept above 50°F if at all possible. It is normally applied by trowel or even by hand, as it has the consistency of "play dough", over a primed surface. It is available in a neutral color or concrete gray and in pre-measured 2 gallon kits. No top coat is required, but please note that there will be discoloration if exposed to sunlight.

Chemical Resistance

ICO Lastic OH can withstand up to 72 hours immersion in the following chemicals

Ammonium Nitrate	Lactic Acid, 20%	Sugars
Beer	Mineral Spirits	Bleach
Palm Oil	Boric Acid	Salt Brine
Carbonated Beverages	Sodium Hydroxide, 50%	Chlorine Water
Sodium Hypochlorite, 10%	Citric Acid	Ethylene Glycol
Sulfuric Acid, 20%	Ferric Chloride	Tartaric Acid
Hydrogen Sulfide	Urine	Jet Fuel
Vinegar	Kerosene	Water, Deionized
Diesel Fuel		

Physical Properties

Tensile Strength (ASTM C-638):	1480 psi
Hardness, Shore A:	80
Tensile Elongation (D-638):	100%
Water Absorption:	0.2% after 7 days
Bond Strength to Concrete:	400 psi (concrete failed)

Physical Characteristics

(Unless otherwise designated, for **ICO Lastic OH**)

Density, lbs. /gal.		Viscosity @ 77°F, cps	
Part A:	9.34	Part A:	120,800
Part B:	7.91	Part B:	380
A&B Mixed:	9.20	A&B Mixed:	60,000

Mixing Ratios:	By Volume	By Weight
Part A : Part B	8.09:1	9.55:1
Fill: Liquid A&B	1:1	2:1

Curing Times @:	40°F	50°F	70°F	90°F
Pot Life:	30 min.	30 min.	30 min.	20 min.
Work Time:	45 min.	45 min.	35 min.	30 min.
Hard Foot Traffic:	68 hrs.	24 hrs.	9 hrs.	6 hrs.

Shelf Life

1 year at 77°F in unopened containers

Maximum Hardness achieved after 7 days @77°F.

Color Availability

Neutral and Concrete Gray

Packaging and Coverage Rates

2 Gallon Kit: Approximately 3SF @ 1" thickness

Installation

Please refer to our Application Specs for detailed instructions. Particular care must be taken to follow those instructions precisely to assure proper installation.

1. All surfaces to be covered should be power washed and/or mechanically ground to remove all loose, deteriorated substrate. Any rusted metal should either be sand blasted clean and primed with ICO Primer LV or if some residual rust, primed with ICO Rust Guard prior to application of ICO Lastic OH.

2. Prime all masonry surfaces with ICO Primer XT so that the entire surface is wetted out. Allow to tack up prior to application of the ICO Lastic OH.

3. Mix Part A and Part B of ICO Lastic OH at low speeds (<750 rpm's) with a jiffy style mixer for at least 30 to 60 seconds, then slowly add Part C filler. Note that you should not add in the entire fill material, but blend it in slowly until you have achieved your desired consistency (the "best" consistency varies with the application temperature).

4. Apply with steel trowel or by hand (using rubber gloves) to completely fill area to be patched. Deeper overhead patches should be done in at least two passes. Finish smooth with trowel lubricated with isopropyl alcohol.

Failure to follow the above instructions, unless expressly authorized by a Milamar Technical Service Representative, will void our material warranty.

Precautions

- 1. Apply over a wet or tacky primer.**
- 2. Do not apply below 40°F.**
- 3. If color change an issue, top coat with one of our UV resistant urethane coatings.**

Product Specification

The specified area shall receive an application of **ICO Lastic OH** as manufactured by **Milamar Coatings LLC. of Oklahoma City, Oklahoma**. The material shall be installed by precisely following the manufacturer's published recommendations pertaining to surface preparation, mixing, and application. The material shall be a low odor, solvent-free, 100% solids epoxy-modified polyurethane with no toxic byproducts. It shall have an elongation of at least 100% at 70°F when tested using ASTM D638. Material shall also have a tensile strength of at least 1400 psi and bond strength greater than the cohesive strength of concrete. The system shall be unaffected by most caustics, oils, greases and many low strength acids.

The data statements and recommendations set forth in this product information sheet are based on testing, research and other development work which has been carefully conducted by us, and we believe such data. Statements and recommendations will serve as reliable guidelines. However, this product is subject to numerable uses under varying conditions over which we have no control, and accordingly we do NOT warrant that this product is suitable for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and particular use or uses.

LIMITED WARRANTY

Milamar Coatings products are manufactured to be free of defects in material and workmanship in meeting the properties specified on its individual Product Data Sheets. Users and installers of Milamar Coatings products are solely responsible for determining the suitability of the products for specific product applications. Milamar Coatings makes no Warranty or Guarantee, express or implied, including warranties of fitness, design compatibility or merchantability, for any particular use and shall have no responsibility or liability, including direct, indirect or consequential damages, due to injury, delay or third party claims for installation or repair. Likewise, Milamar Coatings assumes no liability of any nature for products that are adjusted in the field or that do not utilize all specified Milamar Coatings components. Should any Milamar Coatings product be proved to be defective within one year from the date of shipment, Milamar Coatings will, at its sole discretion, either replace the material; issue a credit to the customer's account; or provide a cash refund for the initial, paid purchase price of the material. Potential claims regarding product quality must be received in writing by Milamar Coatings within 30 days of the discovery of such potential defect. This Warranty is exclusive of all other warranties, expressed or implied, and may only be adjusted in writing, signed by an officer of Milamar Coatings, L.L.C.

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