



ICO Lastic / ICO Lastic Gun Grade

Product Data Sheet

Product Description

ICO-Lastic is a two part, 100% solids epoxy-modified urethane. With elongation of 140%, it combines the elastomeric properties of a urethane with the excellent dry and damp adhesion of an epoxy. Normally applied by roller or squeegee down to a minimum thickness of 20 mils, **ICO-Lastic** offers an impermeable moisture barrier against standing water. Applied by trowel in a "gun grade" version, **ICO Lastic Gun Grade**, it can also be used for interior expansion joints where moderate movement is expected. At minimum 60 mil thick applications, **ICO-Lastic** offers excellent crack bridging characteristics for inside or outside concrete structures. It will withstand light to moderate tow motor and automobile traffic.

Product Application

ICO-Lastic is used in food and beverage plants, where it's no odor characteristics are desirable, as a waterproof membrane underneath acid brick or tile floors. Applied at approximately 60mils, it provides a good secondary containment barrier against some acids, caustics and fuel oils. For more highly corrosive areas, where crack bridging is required, **ICO-Lastic** is applied beneath one of our quarter inch higher chemical resistant epoxy overlays. **ICO-Lastic** also acts as a complete waterproofing barrier for parking garages, balconies, walkways and roof decks (use **ICO Ure Guard 80** or **100** for better UV resistance).

ICO-Lastic Gun Grade offers a resilient (100% tensile elongation) yet tough caulking material that will hold up to normal fork lift traffic in expansion joints where moderate movement is expected. For old concrete floors, where little movement is expected, use of our 100%solids epoxy, **ICO Caulk**, is preferred.

Chemical Resistance

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

Ammonium Nitrate Diesel Fuel	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

Physical Properties

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

Tensile Strength (ASTM C-638):	1480 psi	Tensile Elongation, Gun Grade:	100%
Rebound Resiliency, %:	30%	Hardness, Shore A, Gun Grade:	80
Tensile Elongation (D-638):	140%	Bond Strength To Concrete:	400 psi (Concrete Failed)
Hardness, Shore A:	80	Water Absorption:	2% after 7 days

Physical Characteristics

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

	Density lbs./gal.	Gun Grade
Part A:	9.34	10.1
Part B:	7.91	7.91
A&B Mixed:	9.20	9.93

	Viscosity @ 77°F, cps	Gun Grade
Part A:	15,200	120,800
Part B:	380	380
A&B Mixed:	10,880	60,000

Mixing Ratios:	By Volume	By Weight
Part A : Part B	8.09:1	9.55:1
Part A : Part B, GG	9.02:1	11.52:1

Curing Times @:	40°F	50°F	70°F	90°F
Pot Life:	30 min.	25 min.	20 min.	8 min.
Work Time:	45 min.	30 min.	20 min.	10 min.
Hard Foot Traffic:	72 hrs.	28 hrs.	15 hrs.	6-8 hrs.

Maximum Hardness achieved after 7 days @77°F.

Color Availability

All of our standard colors

Shelf Life

1 year at 77°F in unopened containers

Packaging and Coverage Rates

ICO-Lastic (for 20 mils)

4 gallon kit : 320 SF

25 gallon kit : 2000 SF

ICO-Lastic Gun Grade

1 gallon kit : 75 LF, 1/2" x 1/2"

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. New concrete should be allowed to cure a minimum of 28 days and/or be checked with a rubber mat or plastic sheet to insure adequate curing time.
2. All surfaces to be covered should be power washed, shot blasted, acid etched, scarified or sanded to present a clean, sound substrate to which to bond to. The prepared surface should have a ph. of 7.
3. **ICO Lastic** is a self-priming material; however application of a single coat of **ICO Primer LV** over porous substrates is recommended to help prevent out gassing. Apply at a coverage of 180-200 SF/gallon and allow to dry.
4. Mix Part A and Part B components at slow speeds (< 700 rpm) with a Jiffy style mixer for at least two minutes, until uniform in color. See Tech Bulletin 117 for details.
5. Pour the mixture onto the substrate and spread with a squeegee, trowel or roller at a coverage rate of no greater than 80 SF/gallon (for 20 mils). Spike roll with a porcupine roller to help release air.
6. If an anti-slip surface is required, broadcast in aggregate.
7. No top coating is required; however, if exposure to UV light, application of one of our urethane coatings is recommended.

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

Precautions

1. **For crack bridging (up to 1/8" wide), apply ICO Lastic at least 60 mils thick.**
2. **ICO Lastic Gun Grade, with 100% elongation, best suited for inside expansion joints with only moderate temperature swings.**
3. **Do not apply below 40°F.**

Product Specification

The specified area shall receive an application of **ICO-Lastic** 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. The material shall be available in a variety of acceptable colors. It shall have an elongation of at least 140% 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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