

Product Data Sheet

Product Description

ICO-Sealer™ is a two part, solvent-free clear epoxy sealer. It has no odor during application and no toxic byproducts. It is normally applied anywhere up to 20 mils (80 sf/gal) in a single coat. It possesses excellent damp, as well as dry adhesion to concrete, masonry, wood and metal surfaces. Unlike conventional epoxy sealers **ICO-Sealer™** has enhanced flexibility with a 9% tensile elongation for improved mechanical impact and thermal shock resistance. It dries to a high gloss, water white finish. For faster cures **ICO Sealer FC™** should be used.

Typical Application

ICO-Sealer™ is recommended for food and beverage distribution centers and aisle ways where odor and contamination of product cannot be tolerated. It is an excellent replacement for solvent based coatings in inside applications such as auto repair centers, manufacturing and assembly areas. **ICO-Sealer™** is also used to seal old, worn terrazzo floors, as well as being used as a top clear coat in our **ICO- Flake™** and **ICO- Quartz™** decorative flooring systems. **ICO-Sealer™** can also be used as a clear sealer over one of our pigmented coatings to better hide scratches, tire marks, and scuffing and eliminate the need for costly waxing of the floor. For sealing concrete floors where water white clarity is not an issue, then our **ICO Primer LV** is a more economical choice. For areas exposed to UV light, then use one of our urethane coatings.

Chemical Resistance

ICO Sealer is virtually identical to our **ICO Guard** product line in chemical resistance (see Chemical Resistant Chart).

Physical Properties

Tensile Strength (ASTM D-638):	1560 psi	Bond Strength to Quarry Tile:	>1000 psi
Tensile Elongation (D-638) fast Cure:	9%	Vapor Transmission Rate (E-96):	.03 perms
Hardness, Shore D (D-2240):	80	Water Absorption (D-570):	0.2% in 24 hours
60° Gloss:	95	Taber Abrasion (D-1044), CS 17, 1000g, 1000 cycles	105 mg loss

Physical Characteristics

Mixing Ratios	By Volume	By Weight
Part A: Part B:	1.75:1	1.94:1

Density, lbs./gal.	
Part A:	9.55
Part B:	8.60
A&B Mixed:	9.23
Viscosity @77°F, cps	
Part A:	700
Part B:	400
A&B Mixed:	600

Curing Times @:	50°F	77°F	90°F
Pot Life:	65 min.	55 min.	25 min.
Work Time:	55 min.	40 min.	20 min.
Hard, Foot Traffic:	70 hrs.	30 hrs.	20 hrs.
Hard, Truck Traffic:	80 hrs.	40 hrs.	25 hrs.

Maximum hardness and chemical resistance are achieved after 7 days @77°F.

Color Availability

ICO-Sealer™ is a clear unpigmented sealer.

Shelf Life

1 year if stored at 60-80°F in unopened containers.

Packaging and Coverage Rates (for 10 mils DFT)

4 gallon kit	: 640 SF
20 gallon kit	: 3200 SF
100 gallon kit	: 16,000 SF

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. On uncoated concrete floors, clean by either acid etching with a 10% muriatic acid solution, followed by a neutralizing rinse, or if the concrete has a smooth power trowelled surface, lightly shot blast or diamond grind. Oil saturated floors must be thoroughly cleaned with a heavy duty degreasing agent. Repeat if necessary.

2. Patch all cracks over 1/8" in width with **ICO Gel™**. Slightly pitted concrete can be skimmed with **ICO Primer Slurry Mix**. Spalled concrete or holes should be filled with **ICO Patch**.

3. No primer is necessary, as **ICO Sealer™** is self-priming. However if floor is particularly porous, a first coat of **ICO Primer™LV** or **LV FC** is recommended to seal the floor. Allow to dry tack free.

4. **ICO Sealer™** can be applied by a roller or notched rubber squeegee. For spray applications refer to our Installation Manual, paragraph 7.4.

5. Recommended coverage is 160 SF per gallon per coat, yielding a finished thickness of about 10 mils depending on porosity. For application thickness >15mils, use of a spiked roller is recommended to help eliminate air bubbles.

6. Multiple coats can usually be applied as soon as the first coat is tack free. If the base coat is allowed to dry hard, (for truck traffic), it must be sanded prior to application of the second coat.

7. A suitable aggregate may be broadcast onto the surface and backrolled to provide more anti-slip profile to the finished surface. It is advisable to test various types and sizes of aggregate to achieve the desired finish profile.

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

Precautions

1. **Do not apply more than 20 mils (80SF/gallon) per coat, as clarity is diminished.**
2. **Recoat window without sanding at 70°F: 40 hours.**
3. **Do not apply below 50°F.**

Product Specification

The specified area shall receive an application of **ICO-Sealer™** as manufactured by **Milamar Coatings LLC. of Oklahoma City, Oklahoma**. The system 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, high gloss flexibilized epoxy system with good resilience to resist thermal and mechanical shock. The system must adhere to damp as well as dry concrete, wood, metal, tile, terrazzo, and sound existing epoxy and urethane coatings. It shall have an elongation of 9% in the unfilled form, when tested using ASTM D-638. The maximum film hardness shall be a Shore D of 80. The system shall be unaffected by oils, greases, and

resist such chemicals as 36% hydrochloric acid, 10% nitric acid, 30% phosphoric and 50% sodium hydroxide.

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 numerous 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.

Milamar Coatings, L.L.C.

311 NW 122nd St, Suite #100
Oklahoma City, OK 73114
800.459.7659
www.milamar.com