



ICO Sealer Fast Cure

Product Data Sheet

Product Description

ICO-Sealer FC™ 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) as a single coat. ICO Sealer FC™ is a single, one coat system and cannot be recoated or top coated with itself or any other product. It possesses excellent damp, as well as dry adhesion to concrete, masonry, wood and metal surfaces. Unlike conventional epoxy sealers ICO-Sealer FC™ has enhanced flexibility with a 10% tensile elongation for improved mechanical impact and thermal shock resistance. It dries to a high gloss, water white finish.

Typical Application

ICO-Sealer FC™ 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 FC™ 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 FC™ 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 FC is a modified acrylic epoxy and therefore has slightly different chemical resistance properties, as shown in the following chart:

Acetic Acid, 10%:	S	Lactic Acid, 20%:	S
Phosphoric Acid, 30%:	R	Sodium Hypochlorite, 10%:	I
Bleach:	I	Maleic Acid, 50%:	R
Phosphoric Acid, 50%:	S	Sodium Hypochlorite, 15%:	I
Citric Acid, Conc.:	I	Methy Ethyl Ketone:	NR
Salt Brine:	I	Sulfuric Acid, 10%:	S
Hydrogen Peroxide, 32%:	R*	Nitric Acid:	R
Sodium Hydroxide, 50%:	I	Sulfuric Acid, 50%:	S
Isopropyl Alcohol:	I	Nitric Acid, 30%:	R

Sugars (corn syrup):	I	Sulfuric Acid, 80%:	R
Key: I – No attack within 30 days R – No attack within 7 days S – No attack within 72 hours OS – No attack within 24 hours NR – Not recommended *Some staining			

Physical Properties

Tensile Strength (ASTM D-638):	3200 psi	Vapor Transmission Rate (E-96):	.03 perms
60° Gloss:	95	Water Absorption (D-570):	0.2% in 24 hours
Bond Strength to Quarry Tile:	>1000 psi	Hardness, Shore D (D-2240):	90
Tensile Elongation (D-638):	10%	Taber Abrasion (D-1044), CS 17, 1000g, 1000 cycles:	75 mg loss

Physical Characteristics

Mixing Ratios	By Vol.	By Wt.
Part A : Part B	1.92:1	2.21:1

Density, Lbs./Gal.	Viscosity @ 77°, cps
Part A:	9.40
Part B:	8.18
A&B Mixed:	9.02
Part A:	1300
Part B:	150
A&B Mixed:	530

Curing Times @:	50°F	70°F	90°F
Pot Life:	20 min.	15 min.	10 min.
Working Time:	18 min.	12 min.	8 min.
Hard, Foot Traffic:	32 hrs.	18 hrs.	9 hrs.
Hard, Truck Traffic:	40 hrs.	24 hrs.	12 hrs.

Color Availability

ICO-Sealer FC™ is a clear, un-pigmented 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 FC™ 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 FC™ 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. A suitable aggregate may be broadcast onto the surface and back rolled 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 (80 sf/gallon), as clarity is diminished.

2. Do not apply below 50°F.

3. ICO Sealer FC has a very limited working time; mix up small quantities; pour out of mixing bucket immediately and spread with squeegee.

4. ICO Sealer FC is a single, one coat system and cannot be recoated or top coated with itself or any other product.

Product Specification

The specified area shall receive an application of ICO-Sealer FC™ 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.

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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