



**Resilient
Epoxy
Flooring
and
Grouting
Systems**

PRODUCT DATA SHEET

ICO-SEALER™

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 aiseways 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). **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 (Regular Cure, except where otherwise noted.)

Tensile Strength, Reg Cure	: 1560 psi	60°Gloss	: 95
(ASTM D-638) Fast Cure	: 3200 psi	Bond Strength to Quarry Tile	: >1000 psi
Tensile Elongation, Reg.Cure	: 9%	Vapor Transmission Rate (E-96)	: .03 perms
(D-638) Fast Cure	: 10%	Water Absorption (D-570)	: 0.2% in 24 hours
Hardness, Reg. Cure	: 80	Taber Abrasion (D-1044), Reg Cure	: 105 mg loss
Shore D (D-2240) Fast Cure	: 90	CS 17, 1000g, 1000 cycles, Fast Cure	: 75 mg loss

Physical Characteristics

Mixing Ratios	By Volume	By Weight
Pt. A : Pt. B	1.75:1	1.94:1
Pt. A : Pt. B, Sealer FC	1.9:1	2.2:1
Density, lbs/gal.	Reg Cure	Fast Cure
Pt. A :	9.5	9.4
Pt. B :	8.6	8.1
A&B Mixed :	9.2	8.8
Viscosity@77°F, cps	Reg Cure	Fast Cure
Pt. A :	700	1300
Pt. B :	400	150
A&B Mixed :	600	530

Curing Times @	50°F	77°F	90°F
ICO Sealer			
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.
ICO Sealer FC			
Pot Life	20 min.	15 min.	10 min.
Work 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.

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 an ICO 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; for Fast Cure at 70°F : 24 hours**
3. **Fast Cure version has a very limited working time; mix up small quantities; pour out of mixing bucket immediately and spread with squeegee**

Product Specification

The specified area shall receive an application of **ICO-Sealer™** as manufactured by **International Coatings of Franklin Park, Illinois**. 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.

Mission Statement

Our mission is to provide our customers the highest possible quality products and services and by doing so, build long term relationships based on mutual trust and respect.

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.

WARRANTY - All products manufactured by us are warranted to be first class material and free from defects in material and workmanship.

Liability under this warranty is limited to the net purchase price of any such products proven defective or, at our option, to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. **WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL.**

THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND NO REPRESENTATIVE OF OURS OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS.



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