



**Resilient  
Epoxy  
Flooring  
and  
Grouting  
Systems**

# PRODUCT DATA SHEET

## ICO GUARD SL™

### Product Description

ICO Guard SL™ is a three part, 100% solids, USDA-approved epoxy flooring resurfacer. Normally applied between 1/16" and 1/8" thick in a single step self leveling application, **ICO-Guard SL™** quickly and economically restores pitted and damaged concrete floors to a smooth and glossy finish. It has superior chemical resistance to most acids, caustics and solvents, compared to conventional amine-based epoxy systems. Its ability to resist impact is enhanced by its resilient formulation.

ICO Guard SL's™ resin rich mix allows for a single step application without need of a sealer coat. For more decorative floors, decorative flakes can be added, followed by a coat of our clear epoxy sealer, **ICO-Sealer**. For anti-slip textures, fine silica sand or aluminum oxide can be broadcast into the clear top coat. For faster turnaround times and applications down to 40°F, **ICO-Guard SL FC™** can be used.

### Typical Application

ICO Guard SL™ is an ideal system where a smooth, but chemical and wear resistant surface is required. Typical applications include dry food processing areas such as cereal plants and bakeries, laboratories, clean rooms, and electronic manufacturing plants. Applied as a self leveling/seed system and top coated with **ICO Guard Coating™**, **ICO-Guard SL™** can provide an economical, slip resistant, high build flooring system for heavy wear areas.

### Chemical Resistance

ICO Guard SL™ is recommended for areas subjected to such chemical solutions as 80% sulfuric, 30% nitric, 85% phosphoric, concentrated lactic, 50% sodium hydroxide, toluene and xylene. A more complete list of chemical resistance is available in the **International Coatings Chemical Resistance Chart** under "ICO Guard".

### Physical Properties

Tensile Strength	(ASTM C-307)	:1810 psi	Vapor Transmission Rate	(E-96)	:.03 perms
Tensile Elongation	(C-307)	:10%	Coefficient of Thermal Expansion	(D-696)	:1.7 x 10 <sup>-5</sup> per °F
Flexural Strength	(C-580)	:1760 psi	Gardner Impact	(D-2794)	:120 in lbs.
Compression Strength	(C-579)	:6100 psi	Water Absorption	(D-570)	:0.2% in 24 hours
Hardness, Shore D	(D-2240)	:80	Taber Abrasion CS17		:110 mg. Loss
Bond Strength to Quarry Tile		:>1000 psi			1000 cycles at 1 kg.
Flammability	(D-635)	:Self Extinguishing			

### Physical Characteristics

	ICO Guard SL		ICO Guard SL FC				
	Mixing Ratios	By Volume	By weight	By Volume	By weight		
Density, lbs/gal.							
Pt. A	10.4	Pt. A : Pt. B	2.1 : 1	2.5 : 1	3.5 : 1	4.1 : 1	
Pt. B	8.6	Aggregate : Liquid	1 : 1	1.5 : 1	1 : 1	1.5 : 1	
A&B Mixed	9.8	<b>Curing Times @</b>	<b>40°F</b>	<b>50°F</b>	<b>70°F</b>	<b>90°F</b>	
<b>Viscosity@77°F, cps</b>		<b>ICO Guard SL</b>	Pot Life	---	60min	50min	25min
Pt. A	700		Work Time	---	75min	60min	45min
Pt. B	300		Tack Free	---	30hrs	16hrs	8hrs
A&B Mixed	630		Hard, Foot	---	64hrs	30hrs	12hrs
			Hard, Truck	---	75hrs	36hrs	18hrs
		<b>ICO Guard SL FC</b>	Pot Life	45min	40min	20min	---
			Work Time	50min	45min	35min	---
			Tack Free	16hrs	11hrs	4hrs	---
<b>Shelf Life</b>			Hard, Foot	28hrs	22hrs	10hrs	---
1 year at 77°F in unopened containers.			Hard, Truck	34hrs	28hrs	14hrs	---

### Color Availability

Standard colors: White, gray, dark gray, beige, yellow, red, green, blue, brown, black.

### Packaging and Coverage Rates

4 gallon Kit  
50 SF at 1/8" depth  
100 SF at 1/16" depth

## 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 has occurred.
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. Cracks 1/8" wide or greater, pour joints and construction joints must be cleaned and filled with **ICO Gel™**. Patch all holes over 1/2" deep with **ICO Patch™**.
4. **ICO Guard SL™** is a self-priming material; however any porous substrate should first be sealed with **ICO-Primer LV** or **ICO Primer LV FC** and allowed to dry tack free to minimize out gassing.
5. The three ingredients should be mixed in the prescribed ratios, using a low speed jiffy-style mixer (maximum 750 rpm), until uniform in color and consistency.
6. Do not add solvent to the mix.
7. Apply **ICO Guard SL™** with a gauge rake, notched rubber squeegee or steel trowel. Use porcupine roller to help level the floor and break up air bubbles.
8. For an anti-slip, high wear resistant surface, apply **ICOGuard SL™**, seed to excess with silica sand, allow to dry and apply top coat of **ICO Guard Coating™**.
9. For applications down to 40°F or for faster cures use **ICOGuard SL FC**. Note that at temperatures below 60°F, however, the self leveling properties diminish and the floor will have to be spread with steel trowels or less sand used.

NOTE: Failure to follow the above instructions, unless expressly authorized by an ICO Technical Service Representative, will void our material warranty.

## Precautions

1. Only apply over a tack free primer to help prevent out gassing
2. Do not apply below 50°F; use **ICO Guard SL FC** instead.
3. Do not apply less than 60 mils thick (100 SF/4gal kit)
4. Do not apply on a floor sloped > 1/8" per foot
5. Do not apply fast cure version >70°F
6. Do not apply in severe thermal shock environment.

## Product Specification

The specified area shall receive an application of **ICO-Guard SL™** as manufactured by **International Coatings, 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, three part, solvent-free 100% solids epoxy system with moderate resilience to resist thermal and mechanical shock. It should be applied by notched trowel or squeegee in one application without needing a top coat. It shall be a resin-rich mix ratio of 1:1, **ICO-Fill™** aggregate to resin and hardener. It shall have an elongation of 10% when tested using ASTM C-307 and Gardner Impact of 120 inch pounds. The compressive strength when tested in accordance with ASTM C-579 shall not exceed 6200 psi and the hardness shall not exceed 80 (Shore D). It shall have excellent adhesion to wood, metal, tile, brick and damp as well as dry concrete. The system shall be unaffected by oils and greases and have high chemical resistance against acids such as 50% sulfuric, 50% nitric, 88% lactic, 85% phosphoric and 20% acetic, as well as resist such caustics as 50% sodium hydroxide and 26% ammonium hydroxide.

## Mission Statement

Our mission is to provide our customers the highest possible quality products and services and by so doing, 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 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.

**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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