



ICO Super Guard SL

Product Data Sheet

Product Description

ICO-Super Guard SL™ is a three-part self-leveling epoxy novolac material primarily used for resurfacing worn and pitted concrete floors. It is a 100% solids solvent-free material with low odor that is normally applied between 1/16" and 1/8" in a single application. **ICO Super Guard SL™**, as a novolac epoxy, is our highest chemical resistant self-leveling material, with excellent resistance to concentrated acids, caustics and most solvents. As indicated by its tensile elongation of 6.4%, it has enhanced resiliency for better resistance to mechanical shock compared to more brittle conventional epoxy and vinyl ester toppings.

ICO-Super Guard SL™ has excellent damp, as well as dry adhesion to concrete, metal, brick and tile surface. For enhanced slip resistance, a top coat of **ICO-Super Guard Coating™** seeded with silica sand, aluminum oxide or other suitable filler is recommended. **ICO-Super Guard SL™** is a dense, impervious material that provides a complete moisture vapor barrier and thus, is suitable for outdoors as well as interior applications.

Typical Application

ICO-Super Guard SL™ is particularly recommended in moderate wear containment applications, such as tank farms, chemical waste storage areas and solvent recycling facilities that must comply with EPA regulations for containment of hazardous materials. It is also an excellent choice for plating areas where a wide variety of solvents, acids and caustics are present. It is particularly suitable for etching operations where hydrofluoric acid is present. **ICO-Super Guard SL™** is economical to install and will provide for longer service life than a thin film coating. For heavy wear areas such as drum storage or truck unloading areas we recommend use of our **ICO-Super Guard™** quarter inch trowelled system or alternatively, seed the self-leveling material to excess with silica quartz and top coat with **ICO-Super Guard Coating™**

Chemical Resistance

ICO-Super Guard SL™ generally follows the chemical resistance of "ICO-Super Guard" as listed in our Chemical Resistance Chart. However, some differences will exist, so consultation with **Milamar** Technical Service is recommended for specific applications.

Physical Properties

Tensile Strength (ASTM C-307):	2277 psi	Compression Strength (C-579):	5118 psi
Flammability (6-35):	Self-extinguishing	Gardner Impact (D-570):	160 in. lbs.
Tensile Elongation (C-307):	6.4%	Hardness, Shore D:	83
Vapor Transmission Rate (E-96):	.27 perms	Water Absorption (D-570):	2% in 24 hrs.
Flexural Strength (C-580):	3825 psi	Bond Strength to Quarry Tile:	>1000 psi
Coefficient of Thermal Expansion (D-696):	5.9×10^{-5}	Taber Abrasion, CS 17, 1000 cycles at 1kg.	102 mg. loss

Physical Characteristics

Density, lbs./gal.	
Part A:	10
Part B:	9
A&B Mixed:	9.8
Viscosity @ 77°F, cps	
Part A:	920
Part B:	100
A&B Mixed:	880

Mixing Ratios	By Volume	By Weight
Part A : Part B:	2.1:1	2.4:1
Aggregate : Liquid	0.9:1	1.4:1

Curing Times @	50°F	77°F	90°F
Pot Life:	35 min.	30 min.	20 min.
Working Times:	20 min.	20 min.	20 min.
Hard, Foot Traffic in 24 hrs.	10 hrs.	7 hrs.	4 hrs.

Shelf Life

1 year at 77°F in unopened containers

Maximum Hardness achieved after 7 days @77°F.

Color Availability

Standard Colors: gray, dark gray, beige, red, green, brown, black.

Packaging and Coverage Rates

4 gallon kit 50 SF at 1/8"
100 SF at 1/16"

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 or be checked with a rubber mat or plastic sheet to insure adequate curing time has occurred.
2. All new 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™**.
4. **ICO-Super Guard SL™** is a self-priming material; however, any porous substrate should first be sealed with **ICO-Primer™ LV** or **LV FC** and allow to dry tack free.
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-Super Guard SL™** with a gauge rake, notched rubber squeegee or steel trowel. Spike roll with a porcupine roller to facilitate air release and to achieve a more uniform surface.
8. For an anti-slip, high wear resistant surface, apply **ICO-Super Guard SL™**, seed to excess with silica sand, allow to dry and apply top coat of **Super Guard Coating™**.

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

Precautions

1. **This is a very fast reacting product; immediately pour onto floor after mixing**
2. **A severe skin and eye irritant. Check with MSDS before use**
3. **Only apply over a tack free primer to prevent out gassing**
4. **Do not apply below 50°F**
5. **Do not apply less than 60 mils thick (100SF/4 gal kit)**
6. **Do not apply on a floor sloped > 1/8" per foot**
7. **Do not apply in severe thermal shock environments.**

Product Specification

The specified area shall receive an application of **ICO-Super Guard SL™** as manufactured by **Milamar Coatings LLC of Oklahoma City, Oklahoma**. The system shall be installed by precisely following the manufacturers' published recommendations pertaining to surface preparation, mixing and application. The material shall be a solvent-free, 100% solid, three part self-leveling epoxy system with a tensile elongation of 6.5% when tested under ASTM C-307

and a Gardner Impact of 160 inch pounds. It shall have excellent adhesion to concrete, metal, brick and tile with a bond strength to tile of at least 1000 psi when tested with an Elcometer Adhesion Tester. The system shall be unaffected by oils and greases and shall withstand chemical attack for at least 72 hours against 98% sulfuric , 50% hydrofluoric acid, 85% phosphoric acid, and 30 % nitric acid.

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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