



# ICO Rust Guard

## Product Data Sheet

### Product Description

ICO-Rust Guard is a two component, 100% solids surface tolerant epoxy coating designed for application to base metal or rusted steel surfaces. Unlike conventional direct to metal coatings, ICO-Rust Guard is solvent-free and odor-free. It dries to a hard, glossy finish. ICO-Rust Guard is especially formulated for excellent resistance to blushing and water spotting when applied in damp conditions. It has excellent adhesion to rusted steel and can also be used on properly prepared steel, galvanized metal or aluminum.

**ICO-Rust Guard** is applied in a single coat by brush, roller, or spray. A minimum 5-7 mil DFT coat is recommended, except where a substantial profile exists, in which case a two coat, 10-14 mil application is preferred. **ICO Rust Guard FC** is also available for applications down to 32°F. Because of its short pot life, we recommend it be purchased only in one gallon kits.

### Typical Application

**ICO-Rust Guard** is ideally suited for coating structural steel and other metal surfaces, especially in food and beverage establishments where minimization of odor is critical. It is also well suited for applications where high humidity and damp conditions are present. ICO-Rust Guard provides maintenance personnel a one-step solution for protecting structural metal and other metallic surfaces from further rusting without need of extensive surface preparation or multiple coat applications. Most importantly, it is a safer alternative to conventional solvent-based coatings. No special ventilation is required, nor do special precautions have to be taken to protect nearby products from contaminants.

### Chemical Resistance

ICO-Rust Guard will resist splash and spillage from dilute acids such as 10% hydrochloric acid and 10% sulfuric acid, caustics such as 10% sodium hydroxide, oils, greases, solvents such as gasoline, brake fluid and mineral oil. For more corrosive areas, application of one of our more chemically resistant coatings over a base coat of ICO-Rust Guard is recommended. Consult the Milamar Coatings Chemical Resistant Chart for specific chemical ratings.

### Physical Properties

Resin Type: Modified Polyamine Epoxy

Percent Solids: 100%

Hardness, Shore D: 77

60° Gloss: ± 95

Salt Spray (ASTM D 1654): Pass 2000 hours

Taber Abrasion (D 1044, CS17, 1000g, 1000cycles): 210 MG Loss

Adhesion To:

Rusted Metal (SSPC-SP-3)	Excellent
Blasted Metal (SSPC-SP-6)	Excellent
Aluminum (Sanded)	Excellent
Galvanized (Sanded)	Excellent

**Physical Characteristics (All data are for Gray #101, Regular Cure, except where otherwise noted).**

Density, Lbs./Gal.	Viscosity @ 77°F, CPS
Pt. A : 14.4	Pt. A : 18,000
Pt. B : 8.6	Pt. B : 520
A&B Mixed: 12.6	A&B Mixed: 2400

Mixing Ratios	By Volume	By Weight
<b>Pt. A : Pt. B, Reg. Cure</b>	<b>2.7:1</b>	<b>4.6:1</b>
<b>Pt. A : Pt. B, Fast Cure</b>	<b>3.1:1</b>	<b>5.3:1</b>

Curing Times @	32°F	50°F	77°F	90°F
Rust Guard, Pot Life	-	50min	50min	40min
Rust Guard, Tack-Free	-	10hrs	4hrs	3hrs
Rust Guard, Hard	-	24hrs	12hrs	10hrs
Rust Guard FC, Pot Life	18min	15min	12min	-
Rust Guard FC, Tack Free	12hrs	8hrs	3hrs	-
Rust Guard FC, Hard	18hrs	12hrs	6hrs	-

**\*Note:** Maximum hardness and chemical resistance are achieved after 7 days at 77°F.

Color Availability	Packaging & Cover Rates
Standard Colors: White, Gray, Beige, Red, Black, & Blue	1 Gallon Kit: Covers 250sq.ft. @6 mils DFT
	4 Gallon Kit: Covers 1,000 sq.ft. @6mils DFT

## Installation

Please refer to our Application Specs for detailed instructions. Particular care must be taken to follow these instructions precisely to assure proper installation.

### 1. Surface Preparation—

a. All Surfaces: Remove all dirt, grease, oil, salt or other contaminants by washing the surface with degreaser, detergent or other suitable cleaner. Rinse thoroughly with fresh water and allow to dry. Thoroughly cured, hard or glossy previous coatings which are smooth should be sanded for better adhesion. Solvent wiping is not recommended.

b. Scrape and wire brush or power tool clean to remove all loose rust, scale or deteriorated old coatings (SSPC-SP2 or SP3). For severe exposure, a minimum commercial grade of sand blasting, e.g., SSPC-SP-5 is recommended.

2. Each ingredient should be mixed with a paint or “jiffy-style” mixer at low to medium speeds (not more than 750 rpm) for about 30-60 seconds before blending, or until uniform in color. Blend entire container of Part B with Part A and mix for an additional 1-2 minutes, again at low speeds.

3. Thinning is usually not necessary unless the material is less than 60°F, in which case MEK may be added to lower viscosity.

4. Use either a good quality natural or synthetic bristle brush, 1/8 to 1/4” nap roller recommended for epoxies, or an airless spray apparatus with the following specifications: 40:1 Pump Ratio, 3500 psi fluid pressure, .021” fluid tip and a minimum 3/4” I.D. air input line.

5. Mix only that amount of material that can be applied within the 50 minute pot life (@77°F). Do not apply coating once it begins to gel.

6. For recoating, apply as soon as first coat is tack-free, but before first coat dries hard.

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

## Precautions

1. For moderate to heavy rust buildup, use two coats at 6 to 7 mils per coat
2. In corrosive areas, use one of our chemically resistant top coats
3. Do not apply Regular cure below 50°F; do not apply Fast Cure below 32°F

## Product Specification

The specified area shall receive an application of ICO-Rust Guard as manufactured by Milamar Coatings L.L.C. of Oklahoma City, Oklahoma. The material shall be a low odor, solvent-free, 100% solid epoxy. It should be able to be applied up to 7 mils DFT on vertical surfaces without sagging. It shall be applied as a one-coat direct to metal finish by brush, roller or spray. It shall dry to a hard glossy finish. It shall be able to be applied in damp, as well as dry environments, over rusted metal, clean metal, aluminum, and galvanized.

## 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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