

STEEL-IT® 2213 Epoxy Ester Precoat is a 1K, low-VOC, fast drying precoat with outstanding resistance to corrosion and excellent adhesion. STEEL-IT® 2213 Epoxy Ester Precoat and STEEL-IT® Polyurethane Topcoat, when paired together in the STEEL-IT® Polyurethane System, offer long lasting resistance to corrosion, abrasion, UV-rays, moisture, salt-spray, and harsh chemicals. Utilizing custom-engineered 316L stainless steel leafing pigment, these single-component coatings create a hard, non-toxic, metallic finish. STEEL-IT® 2213 Epoxy Ester Precoat is compatible with all STEEL-IT® Polyurethane Topcoats. STEEL-IT® 2213 Epoxy Ester Precoat can also be used with other brands of coatings after testing for compatibility.

Applications	<ul style="list-style-type: none"> Machinery; industrial maintenance; architecture and construction; automotive; food processing and packaging; agriculture; aerospace; marine; other Interior and exterior applications: Provides UV/weathering-resistance
Surfaces	<ul style="list-style-type: none"> Steel, galvanized steel, aluminum, nickel-plated steel, copper, brass
System	<ul style="list-style-type: none"> STEEL-IT® 2213 Epoxy Ester Precoat: 1 coat 75 µm Dry Film Thickness (DFT) STEEL-IT® Polyurethane Topcoat: 1 coat 75 µm Dry Film Thickness (DFT) For particularly harsh conditions, a total dry film thickness of 225 µm is recommended: 1 coat of STEEL-IT® 2213 Epoxy Ester Precoat and 2 coats of STEEL-IT® Polyurethane Topcoat For touch-ups, apply STEEL-IT® Polyurethane Aerosol STEEL-IT® 2213 Epoxy Ester Precoat is not weldable. For applications involving welding, the STEEL-IT® Polyurethane Topcoat is applied directly to the metal surface.

Technical Data

STEEL-IT® 2213 Epoxy Ester Precoat	
Color (Closest Pantone)	7624 C
Color (Closest RAL)	3009
Solids by weight	56% ± 2%
Solids by volume	39% ± 2%
Density (calculated)	1,56 kg/L
VOC (calculated)	49,7 g/L
Coverage* at 75 µm Dry Film Thickness (DFT)	4,13 m ² /L



*Values are considered "practical" coverage, calculated for smooth, non-porous surfaces and assume 20% loss due to overspray and waste

Accelerated Aging Tests[†]

	Test Method	STEEL-IT® 2213
Gloss: 60°	ASTM D523	2 - 5
Impact Flexibility: Direct	ASTM D2794	100 (4 lbs)
Corrosion Resistance (Rust at Scribe, 10-0)	ASTM B117/ ASTM D1654	2064 h 9 = < 0.5 mm creepage
Condensing Humidity	ASTM D4585	720 h - Pass
Mandrel Bend	ASTM D522	Pass
Dry Film Adhesion	ASTM D3359, B	5 B

[†]Coatings prepared on cold rolled steel or grit blasted steel and cured 14 days at room temperature.



STEEL-IT® 2213
Scraped panel, 2064 h

Technical Data Sheet

STEEL-IT® 2213 Epoxy Ester Precoat

Surface Preparation	<ul style="list-style-type: none">Surfaces should be clean and free of all rust, paint, greases, waxes, salts, dirt, scale, etc.For best results, grit-blast to SSPC SP-6 (Commercial Blast)Anchor pattern should be cut and angular at 38 50 µm deepPower-sanding with a dual-action sander or random orbital sander using #36 grit sandpaper will similar results
Conditions	<ul style="list-style-type: none">Apply only when ambient and substrate surface temperatures are 10-38 °CRelative humidity less than 85%Temperature of substrate surface and of coating at least 2.75 °C above the dew point.
Application	<ul style="list-style-type: none">Agitate for 5 min with a mechanical paint shaker or a mechanically driven paddle; hand agitation is not sufficientPreferred application method is using an Air, Airless, Air-Assisted Airless, or HVLP spray gun; brush and roller may also be used
Recommended Wet Film Build	<ul style="list-style-type: none">To achieve 75 µm Dry Film Thickness (DFT), apply:<ul style="list-style-type: none">STEEL-IT® 2213 Epoxy Ester Precoat: 1 coat 205 µm Wet Film Thickness (WFT)
Dry Time and Recoat Window	<ul style="list-style-type: none">STEEL-IT® 2213 Epoxy Ester Precoat<ul style="list-style-type: none">Dry to touch: 1 hourTack free to handle: 4 hoursDry to topcoat window: 4-24 hoursIf overcoating with STEEL-IT Polyurethane Topcoat, refer to both the product specific Technical Data Sheet and Application Instructions.If overcoating with another brand, first prepare a test patch on a piece of scrap metal coated with STEEL-IT® 2213 Epoxy Ester Precoat to confirm that the coating you wish to use doesn't wrinkle, bubble, or soften the STEEL-IT® 2213 layer. Confirm that there is good adhesion between the STEELIT® 2213 Epoxy Ester Precoat and the overcoat.If STEEL-IT 2213 Epoxy Ester Precoat is not overcoated within 24 hours, a light scuff-sanding using #400-600 grit paper is required before applying an additional coat.
Curing	<ul style="list-style-type: none">Cure at ambient temperatures of 10–49 °CBoth temperature and climate conditions (e.g. high humidity or high aridity) will impact cure timeCure time required before part can be packaged or put into service depends on how the part will be usedFull cure in 5-7 days after final coat. Corrosion resistance continues to improve with prolonged atmospheric aging over a 4-6 week period
Safety	<ul style="list-style-type: none">Wear a NIOSH-approved respirator with an organic vapor cartridgeUse nitrile glovesApply STEEL-IT® in a well-ventilated area

For detailed information on surface preparation, application instructions, and recommended spray gun equipment settings please refer to the Application Instructions available online at STEEL-IT-EUROPE.com.

The latest versions of the Safety Data Sheets (SDS) are also online at STEEL-IT-EUROPE.com.

The information presented in this Technical Data Sheet is accurate at the date of publication, however the data may be revised as new results become available. The reported values fall within the normal range of measured product properties and should not be used to establish specification limits. All users are responsible for conducting testing to determine the suitability of STEEL-IT Brand Coatings for the specific requirements of their applications.

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