

PRODUCT DESCRIPTION

TWO COMPONENT POLYURETHANE TOPCOAT 53131

(CURING AGENT 20031B)

RSI URETHANE 53131 is a two-component, semi-gloss acrylic polyurethane coating with good gloss and color retention.

RSI URETHANE 53131. As a finishing coat for protection of structural steel in severely corrosive atmospheric environment, where light-fastness and gloss retention are required. Minimum temperature for curing is -10°C/14°F.

Standard color availability Manufactured according RAL catalogue.

GENERAL PROPERTIES

Adhesion	Excellent to primed surfaces.
Weather Resistance	Excellent on correctly prepared and primed steel surfaces.
Temperature resistance	Dry: Maximum 120 °C. At service temperatures above 100°C/212°F, slight discoloration may be expected.

PHYSICAL PROPERTIES:

Colors/Shade No	White / Ral No	Black
Finish	Semi Flat	Semi Flat
Volume Solid	48%	44%
Theoretical spreading rate	12 m ² /liter 40 Mic. Dft.	11 m ² /liter 40 Mic. Dft.
Flash point	32 °C	32 °C
Specific gravity	1.25 – 1.35 kg/liter	1.0 – 1.15 kg/liter
V.O.C.	Max. 380gr/liter	Max. 490gr/liter
Shelf life	1 Year (25°C / 77°F) from time of production. Depending on storage condition, mechanical stirring may be necessary before usage.	

MIXING

Mixing ratio (by weight)	Component A 53131	Component B 20031B
	5.7	1
Pot life	5 hours (20 °C/ 68 °F)	

APPLICATION

Conditions	Do not apply when relative humidity exceeds 80% or when the surface to be coated is less than 3 °C above the dew point.	
Method	Airless sprays	Brush (touch-up)
Thinner (max. vol.)	3030 (10-30%)	3030 (5%)
Spray setting		
Pump ratio minimum	30:1	
Tip size	0.017” – 0.019”	
Tip pressure	150 bar / 2100 Psi (Airless spray data are indicative and subject to adjustment)	
Cleaning of tools	Thinner 3030	
Indicated film thickness, dry	48 microns	
Indicated film thickness, wet	100 microns	

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DRYING AND CURING TIMES AT (20 °C)

Dry to touch	4 hours
Hard dry	24 hours
Full curing	7 days
Recoat interval, min	16 hours
Recoat interval, max	None , see REMARKS

APPLICATION AND CURING CONDITIONS

Primed surfaces The surface must be completely clean and dry at the time of application, and its temperature must be above the dew point to avoid condensation. Minimum temperature for curing is -10°C/14°F. At the freezing point and below, be aware of the risk of ice on the surface which will hinder the adhesion. High humidity and/or condensation during application and the following 16 hours (20°C/68°F) may adversely affect the film formation. In confined spaces provide adequate ventilation during application and drying.

REMARKS

PRECEDING COAT: Epoxy Mid coat such as RSI 64151 and Epoxy Primer such as 74352.

SUBSEQUENT COAT: None.

Colors : Certain lead-free red and yellow colors may discolor when exposed to chlorine- containing atmosphere. Leaded colors may become discolored when exposed to sulfide-containing atmosphere.

Film thickness: May be specified in another film thickness than indicated depending on purpose and area of use.

This will alter spreading rate and may influence drying time and recoating intervals.

Normal range is 40-50 microns/ 1.6 – 2 mils.

Thinning: The type and amount of thinner depend on application conditions, application method, temperature, ventilation, and substrate. Thinner 3030 is recommended in general.

Recoating and drying/curing time Recoating intervals related to later conditions of temperature:
(40 micron/1.6 mils dry film thickness of RSI 52131)

Physical data versus temperatures:						
Surface temperature		-10°C/14°F	0°C/32°F	10°C/50°F	20°C/68°F	30°C/86°F
Dry to touch approx.		3 days	36 hours	16 hours	6 hours	4 hours
Resist condensing humidity/ light showers after :		7 days	3 days	32 hours	16 hours	12 hours
Fully cured		(2 months)	32 days	14 days	7 days	5 days
Recoating interval with 52131	Min	6 days	3 days	32 hours	16 hours	12 hours
	Max	None	None	None	None	None

A completely clean surface is mandatory to ensure intercoat adhesion, especially at long recoating intervals. Any dirt, oil, and grease have to be removed, e.g. with suitable detergent.

Salts to be removed by fresh water hosing. To check an adequate quality of the surface cleaning a test patch is recommended before actual recoating.

SAFETY

Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult RSI material safety data sheets and follow all local and national safety regulations. Harmful or fatal if swallowed; immediately seek medical assistance. Avoid inhalations of possible solvent vapors or paint mist, as well as paint contact with skin and eyes. Apply only on well-ventilated areas and ensure that adequate forced ventilation exists when applying paint in confined spaces or when the air is stagnant. Always take precautions against the risks of fire and explosions.

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Product data sheet 53131

RSI
COATING