



**RSI**  
INDUSTRIAL  
PAINTS Inc.

## POLYURETHANE TOPCOAT RPU-303

### PRODUCT DESCRIPTION

**RPU-303** is a two component acrylic polyurethane coating. It has a good gloss finish and very good levelling characteristics. It has a very good gloss retention. To be used as a topcoat for aggressive atmospheric exposure.

**Recommended use** as a finishing coat for protection of structural steel in severely corrosive atmospheric environment, where colour fastness and gloss retention are required.

### GENERAL PROPERTIES

<b>Adhesion</b>	Excellent to primed surfaces
<b>Weather Resistance</b>	Excellent on correctly prepared and primed steel surfaces.

### PHYSICAL PROPERTIES

<b>Colors/Shade No</b>	RAL No
<b>Finish</b>	Gloss
<b>Volume Solid</b>	50±3%
<b>Theoretical spreading rate</b>	10 m <sup>2</sup> /liter 50 Mic. Dft.
<b>Flash point</b>	31 °C
<b>Specific gravity</b>	1.4±0.05 kg/liter
<b>V.O.C.</b>	Max. 440 gr/liter
<b>Shelf life</b>	1 Year (25°C) from time of production. Depending on storage condition, mechanical stirring may be necessary before usage. Storage environment should be ventilated and away from sunlight and high temperature (above 30 ° C).

### MIXING

<b>Mixing ratio (by weight)</b>	Component A: 5	Component B: 1
<b>Pot life</b>	6 hours (23 °C)	

### APPLICATION

<b>Conditions</b>	Do not apply when relative humidity exceeds 80% or when the surface to be coated is less than 3 °C above the dew point.		
<b>Method</b>	Airless spray	Air spray	Brush (touch-up)
<b>Thinner (max. vol.)</b>	RTH-105 (10%)	RTH-105 (10%)	RTH-105(5%)
<b>Pump ratio minimum</b>	30:1		
<b>Tip size</b>	0.017" – 0.019"		
<b>Tip pressure</b>	150 bar / 2100 Psi		
<b>Cleaning of tools</b>	RTH-105		
<b>Indicated film thickness, dry</b>	40-50 microns		
<b>Indicated film thickness, wet</b>	80-100 microns		

### DRYING AND CURING TIMES

<b>Condition</b>	Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with: * Good ventilation (Outdoor exposure or free circulation of air) * Typical film thickness * One coat on top of inert substrate
<b>Surface temperature</b>	23 °C
<b>Dry to touch</b>	1 hours
<b>Hard dry</b>	8 hours
<b>Full curing</b>	7 days

Recoat interval, min	5 hours
Recoat interval, max	None

## 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. 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 may adversely affect the film formation. In confined spaces provide adequate ventilation during application and drying.

Substrate	Surface preparation	
	Minimum	Recommended
Coated surfaces	Clean, dry and undamaged compatible coating	Clean, dry and undamaged compatible coating

## REMARKS

### Preceding coat

Epoxy mid coat such as REP-202 and Epoxy Primer such as REP-113.

### Subsequent coat

None.

### 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.

### Thinning

The type and amount of thinner depend on application conditions, application method, temperature, ventilation, and substrate. RTH-105 is recommended in general.

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

## 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.

## RSI Co.

Product data sheet RPU-303  
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