



RSI
INDUSTRIAL
PAINTS Inc.

HEAT RESISTANT SILICONE ACRYLIC PAINT RHR-303

PRODUCT DESCRIPTION

RHR-303 is a high temperature resistant (250 °C) acrylic silicone paint for use as a topcoat. This product can be applied for long-term protection of hot pipelines, exhaust pipes, smoke stacks and other hot surfaces.

For use in a wide range of industrial environments including petrochemical plants, oil refineries, offshore structures, chemical plants and power stations.

GENERAL PROPERTIES

Adhesion	Good to both primed and blasted clean surfaces.
Temperature resistance	Dry film: Maximum 250°C.

PHYSICAL PROPERTIES

Colors/Shade No	Grey
Finish	Gloss-Semi flat
Volume Solid	37±3 %
Theoretical spreading rate	14.8 m ² /liter 25 Mic. Dft.
Flash point	25 °C
Specific gravity	1.15± 0.05 kg/liter
VOC	405 g/L
Shelf life	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).

APPLICATION

Conditions	Clean and dry surface with a temperature min. 3 °C above the dew point to avoid condensation. In confined spaces provide adequate ventilation during application and drying.		
Method	Airless sprays	Air spray	Brush (touch-up)
Thinner (max. vol.)	RTH-106 (5%)	RTH-106(15%)	RTH-106(5%)
Pump ratio minimum	30:1		
Tip size	0.017"		
Tip pressure	125 bar / 1800 Psi		
Cleaning of tools	RTH-106		
Dry film thickness	20-30 microns		
Wet film thickness	55-80 microns		

DRYING AND CURING TIMES

Condition	Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. Below data is reported at 25 microns dry film thickness.
Dry to touch	1 hour
Full curing	2 hours at 200 °C
Recoat interval, min	4 hours

APPLICATION CONDITIONS

Surface preparation	All surfaces to be coated should be clean, dry and free from contamination. Prior to paint application, all surfaces should be assessed and treated in accordance with ISO 8504:2000. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.
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Abrasive Blast Cleaning

Abrasive blast clean to SSPC SP10 or Sa2½ (ISO 8501-1:2007). If oxidation has occurred between blasting and application, the surface should be reblasted to the specified visual standard. Surface defects revealed by the blast cleaning process, should be ground, filled, or treated in the appropriate manner.

In the case of zinc primers, where necessary, remove weld spatter, smooth weld seams and sharp edges and blast clean welds and damaged areas to SSPC-SP10 or Sa2½ (ISO 8501-1:2007). Weld seams and damaged areas should be blast cleaned to SSPC-SP10 or Sa2½ (ISO 8501-1:2007). Ensure the zinc primer has fully cured and is clean, dry and free from zinc salts prior to over coating.

REMARKS

Preceding Coat

Can be used directly on blast-cleaned steel. For maximum corrosion protection, a primer coat of one of the following paints is recommended: RHR-102.

This will lower the heat resistance, reference is made to the product data sheets for the mentioned primers.

Film thickness

It is recommended to avoid too high thicknesses of the paint as this will give a risk of blistering at later heating. RTH-106 must be added at application to secure the low dry film thickness. Normal DFT is a 20-30 micron.

Thinning

The type and amount of thinner depend on application conditions, application method, temperature, ventilation, and substrate. RTH-106 is recommended in general.

Recoating and drying/curing time

To obtain full curing RHR-303 requires heating to 200-250°C for at least 2 hours. The coating will otherwise exhibit certain thermo plasticity.

Before recoating after exposure in contaminated environment, clean surface thoroughly by high pressure fresh water hosing and allow to dry.

High temperature service

For high temperature service, the total dry film thickness of the paint system should preferably be kept at 50 microns as maximum.

First exposure to heat

Do not expose the paint system to heat before it is through dry (minimum 12 hours at 25°C).

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 RHR-303

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