



RSI
INDUSTRIAL
PAINTS Inc.

HEAT RESISTANT SILICONE ALUMINUM PAINT RHR-305

PRODUCT DESCRIPTION

RHR-305 is a high temperature resistant silicone aluminum 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.

GENERAL PROPERTIES

Adhesion	Good to both primed and blasted clean surfaces.
Temperature resistance	Dry: Maximum 450°C.

PHYSICAL PROPERTIES

Colors/Shade No	Grey
Finish	Semi flat
Volume Solid	40±3 %
Theoretical spreading rate	16 m ² /liter 25 Mic. Dft.
Flash point	25 °C
Specific gravity	1.1± 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 (10%)	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 micron		
Wet film thickness	50-75 micron		

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 AND CURING CONDITIONS

Surface condition

Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by (high pressure) fresh water cleaning. Abrasive blasting to Sa 2½. Remove salts, detergents and other contaminants by high pressure fresh water cleaning. The required quality of surface preparation can vary depending on the area of use, expected durability and if applicable, project specification.

When preparing new surfaces, maintaining already coated surfaces or aged coatings it is necessary to remove all contamination that can interfere with coating adhesion, and prepare a sound substrate for the subsequent product.

Inspect the surface for hydrocarbon and other contamination and if present, remove with an alkaline detergent. Agitate the surface to activate the cleaner and before it dries, wash the treated area using fresh water. Paint solvents (thinners) shall not be used for general degreasing or preparation of the surface for painting due to the risk of spreading dissolved hydrocarbon contamination. Paint thinners can be used to treat small localized areas of contamination such as marks from marker pens. Use clean, white cotton cloths that are turned and replaced often. Do not bundle used solvent saturated cloths. Place used cloths into water.

New steel

Abrasive blasting to min. Sa 2½ (ISO 8501-1) / SP 10 (SSPC). Remove dust, blast media and loose materials.

Coated surfaces

When the surface is an existing coating, verify with technical data sheet and application guide of the involved products, both over coatability and the given maximum over coating interval.

When applied on coatings past maximum intercoating interval light abrading may be required to achieve proper intercoat adhesion.

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.

Subsequent Coat

None.

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.

High temperature service

For high temperature service, the total dry film thickness of the paint system should preferably be kept at 50 micron 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-305
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