NIPPON PAINT 300 HIGH TEMPERATURE FINISH

Updated Feb '23

NIPPON PAINT 300 HIGH TEMPERATURE FINISH is a silicone acrylic based coating which can withstand continuous temperature up to 300°C. It provides excellent protection for exhaust manifolds, furnaces, boiler, chimneys and other installations exposed to extreme temperatures.

Product Features:

- Withstand continuous temperature up to 300°C
- Available in Aluminium, White & Red Colour

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size
Solvent based	Interior & Exterior	Gloss Limited Colours	Iron and Steel	5 Litres

Composition

Pigment	: Aluminium, Black, White or Red
Binder	: Acrylic and Silicone
Thinner	: Aromatic

Technical Data

Drying Time (25-30°C)	: Touch Dry	: Approximately 0.5 hour (Dependent on temperature and humidity)
	: Hard Dry	: At least 1 hour x 200 °C for full curing
Overcoating Time (25-30°C)	: Minimum 2 hours (Dependent on temperature and humidity)	
Typical Thickness	: 20 - 30 µm dry film per coat (Keep below 40 µm DFT to prevent blistering) 50 - 75 µm wet film per coat	
No. of Coats	: 1 - 2 coats	
Theoretical Coverage	: 20.0 m^2/litre (for dry film thickness of 20 microns) 13.3 m^2/litre (for dry film thickness of 30 microns)	
Practical Coverage (40% Loss Factor, as a guideline)	: 12.0 m^2/litre (for dry film thickness of 20 microns) 8.0 m^2/litre (for dry film thickness of 30 microns)	
Volume Solid	: 40 ± 2% by volume	
Specific Gravity	: 0.98 - 1.35, depending on colours	
Shelf Life	: Up to 24 months in tight sealed container **(Subjected to reinspection after exceeding shelf-life period)**	

Application Method

Thinner	: OP-1 Thinner	
Brush/ Roller	: If necessary, add about 5% thinner by volume.	
Compressed Air Spray	: If necessary, add about 10% to 15% thinner by volume.	
Airless Spray	: Delivery pressure	: 140 – 170 kg/cm^2
	: Tip size	: 0.015" – 0.017"
	: Spray angle	: 60° - 70°
	: Dilution	: Up to 5% thinner by volume

Recommended Coating System

Iron and Steel

Primer	: Nippon Paint 300 High Temperature Primer	: 1 Coat
Intermediate	: Nippon Paint 300 High Temperature Finish	: 1 Coat
Top Coat	: Nippon Paint 300 High Temperature Finish	: 1 Coat
Primer	: Nippon Paint NIOZ	: 1 Coat
Intermediate	: Nippon Paint 300 High Temperature Finish	: 1 Coat

Top Coat	: Nippon Paint 300 High Temperature Finish	: 1 Coat

Surface Preparation

NIPPON PAINT 300 HIGH TEMPERATURE FINISH would not normally be applied directly to steel surface and would only be considered where corrosion problems were insignificant but decoration important. The surface to be painted shall be power tool cleaned to minimum **SSPC-SP3 or St 3 ISO 8501- 1:2007,** free from mill scale. It must be dry and free from dirt, grease, oil and other contaminants. For optimum performance, priming with Nippon Paint NIOZ or Nippon Paint 300 High Temperature Primer to a thickness of 50 and 25 microns respectively is recommended over an abrasive blasted surface to **SSPC-SP10 or Sa 2½ ISO 8501-1:2007**

Cleaning

Cleaning Solvent : OP-1 Thinner. Clean up equipment with thinner immediately after use.

Environmental Conditions During Application

- Do not apply when the relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.
- Do not apply at temperature below 7℃. If not, drying and overcoating times will be considerably extended.
- During application of the paint, naked flame, welding operations and smoking should not be allowed and good ventilation is necessary.

Safety Precautions

- Keep container tightly closed and keep out of reach children or away from food and drink.
- Ensure good ventilation during application and drying.
- During application of paint, naked flames, welding operation, and smoking should not be allowed.
- When applying paint, it is advisable to wear eye protection.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes from skin by using soap or water.
- Paint must always be stored in a cool place.
- When transporting paint, care must be taken. Always keep container in a secure upright position.
- Dispose off any paint waste in accordance with the appropriate Environment Quality Regulations.

Note

* Theoretical Coverage is based on a mathematical formula and does not consider Loss Factor.

$$\left[\frac{Volume\ Solid\ \%\ x\ 10}{Dry\ Film\ Thickness\ (\mu)}\right] = m^2/lit/coat$$

This theoretical coverage rate has been calculated from the volume solids of the material and is related to the amount of coating applied onto a perfectly smooth surface without wastage. For a practical coverage rate, due allowance should be made for atmospheric conditions, surface roughness, geometry of the article being coated, the skill of applicator, method of application etc. when estimating quantities required for a particular job.

The above information is given to the best of our knowledge based on laboratory tests and practical experience.
However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself.
We reserve the right to alter the given without prior notice.