



Sơn Nippon  
Sơn Dầu Công Đẹp

Ref. No. : PDS-1310-EN

Version No. : 2

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## PRODUCT DATA SHEET

# NIPPON S450 HEAT RESISTING BLACK

### Product Description:

NIPPON S450 HEAT RESISTING BLACK is based on silicone resin with pigment which can withstand continuous temperature up to 450°C, provides excellent protection for exhaust manifolds, furnaces, boiler, chimneys and other installations exposed to extreme temperatures.

### Physical Characteristics of Paint:

|                  |                    |
|------------------|--------------------|
| Colour           | : Black            |
| Finish           | : Sheen            |
| Specific Gravity | : 1.30 ± 0.05      |
| Solid Content    | : 46 ± 2 by volume |

### Recommendation for Use:

#### Surface Preparation

NIPPON S450 HEAT RESISTING BLACK would not normally be applied directly to steel surface and would only be considered where corrosion problem were insignificant but decoration important.

The surface should be free of rust, grease, oil and others contaminants. It should be wire brushed to minimum Swedish Standard ST 3.0. For optimum performance, priming with NIPPON INORGANIC ZINC COATING (NIOZ) or NIPPON S500 HEAT RESISTING PRIMER to a thickness of minimum 20 to 25 microns dry film thickness is recommended.

|                                                    |                                                                                                                                 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Recommended No. of Coats                           | : 1 coat                                                                                                                        |
| Recommended Film Thickness per coat                | : 30 microns for dry film<br>66 microns for wet film                                                                            |
| Theoretical Coverage at Recommended Film Thickness | : 15.2 m <sup>2</sup> / liter (for dry film thickness of 30 microns)                                                            |
|                                                    | Theoretical Coverage = $\frac{\text{Volume Solid (\%)} \times 10}{\text{Dry Film Thickness (\mu)}}$<br>(m <sup>2</sup> / liter) |
| Practical Coverage (20% Loss Factor)               | : 12.2 m <sup>2</sup> / liter (for dry film thickness of 30 microns)                                                            |

**Note:** This theoretical coverage rate has been calculated from the volume solid 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.

## NIPPON PAINT (VIETNAM) CO., LTD

No. 14, 3A Road, Bien Hoa Industrial Zone II, Long Binh Tan Ward, Bien Hoa City, Dong Nai Province, Vietnam  
Tel: (84).251.3836579 – 3836586 (8 lines), Fax: (84).251.3836346 – 3836349

[www.nipponpaint.com](http://www.nipponpaint.com)

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## Application Data:

|                        |   |                                                                                             |
|------------------------|---|---------------------------------------------------------------------------------------------|
| Application Methods    | : | Brush, roller, compressed air spray                                                         |
| Guiding Data for Spray | : | <u>Air</u><br>Delivery Pressure (kg/cm <sup>2</sup> ) 3 - 4<br>Tip size at 60° angle 1.3 mm |
| Thinning               | : | Roller & Brush 10% maximum<br>Air Spray 20% maximum (18 to 20 Sec measured by NK 2 Cup)     |
| Mixing Condition       | : | Settlement may occur, stir thoroughly until homogenous before used.                         |

Thinner : NIPPON HEAT RESISTING THINNER

Cleaning Solvent : NIPPON HEAT RESISTING THINNER

**Note:** All equipment should be cleaned IMMEDIATELY with Thinner after use. For thinning, substitute thinners other than those approved or supplied by Nippon Paint may adversely affect the product performance and void product warranty whether expressed or implied.

## Drying Time at 25°C to 30°C:

|                               |   |                          |
|-------------------------------|---|--------------------------|
| Dry to touch                  | : | 30 minutes               |
| Dry to overcoat               | : | Minimum 8 hours          |
| Curing time at 200°C to 240°C | : | Approximately 30 minutes |

Standard Packing : 5 Liters

## Environmental Conditions during Application:

1. Do not apply when the relative humidity exceeds 85%. The temperature of the substrate to be painted must be 3°C higher than the dew point.
2. Do not apply at temperature below 7°C. If not, drying and overcoating time will be considerably extended.
3. During application of the paint, naked flame, welding operations and smoking should not be allowed and good ventilation is necessary.

## Safety, Health and Environmental Information:

1. Flammable Liquid. Do not expose to heat, sparks or open flame.
2. Skin Contact: May cause moderate skin irritation. Avoid prolong contact with skin. Use solvent resistant glove. To remove splashes of paint from skin, use soap and water.
3. Inhalation: Respiratory irritation. Only used in well ventilated areas. Do not breathe vapor or spray paint.

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Respirator with organic vapor cartridges recommended.

4. Eye Contact: Cause severe eye irritation and blurred vision. Safety glasses / goggles with side shields recommended. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
5. Ingestion: Harmful if swallowed. Keep away from drinks, food and out of reach of children. If swallowed, seek medical advice immediately and show the container or label.
6. In the event of an accident, contain and collect spillage using sand or earth or absorbent. Do not empty into drain or water courses.
7. Wastes and empty containers should be treated and disposed of in accordance with national and local regulations. Empty containers and packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor.

**NOTE:** The information given applies to the product and its performance under specific test conditions. Due to the varied circumstances beyond our control under which the product may be applied, for specific application, please contact Nippon Paint Sales & Marketing Dept. We reserve the right to modify our product data sheet without further notice.

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