# NATIONAL ALUMINIUM H.R. 400°C

## PRODUCT DESCRIPTION

A heat resistant silicon based aluminium paint for atmospheric exposure conditions having good weather resistance. It has good flow and leveling and has heat resistance up to 400°C. It should preferably be applied by spray to get the best results. An initial minimum temperature of 200°C is required to initiate the cure of the film.

## RECOMMENDED USES

A heat resisting paint for steel structure, pipes, power stations etc. where heat resistance up to 400°C is required.

## TECHNICAL DATA

<table>
<thead>
<tr>
<th>COLOUR, DRY FILM</th>
<th>Aluminium</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINISH, DRY FILM</td>
<td>Metallic / Lustrous</td>
</tr>
<tr>
<td>VOLUME SOLIDS</td>
<td>24 ± 2%</td>
</tr>
<tr>
<td>(ASTM D2697)</td>
<td></td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>0.95 ± 0.05</td>
</tr>
<tr>
<td>THEORETICAL SPREADING RANGE</td>
<td>8.0 M²/LTR</td>
</tr>
<tr>
<td>RECOMMENDED DFT RANGE</td>
<td>30 Microns/Coat</td>
</tr>
<tr>
<td>(DRY FILM THICKNESS)</td>
<td></td>
</tr>
<tr>
<td>RECOMMENDED WFT RANGE</td>
<td>125 Microns/Coat</td>
</tr>
<tr>
<td>(WET FILM THICKNESS)</td>
<td></td>
</tr>
<tr>
<td>FLASH POINT</td>
<td>25°C</td>
</tr>
<tr>
<td>FLEXIBILITY</td>
<td>Good</td>
</tr>
<tr>
<td>ABRASION RESISTANCE</td>
<td>Good</td>
</tr>
<tr>
<td>WEATHER RESISTANCE</td>
<td>Good</td>
</tr>
</tbody>
</table>

## DRYING TIME

Drying time @ 30°C (Temperature, humidity, air movement, film thickness and number of coats all affect the drying time.)

<table>
<thead>
<tr>
<th>TOUCH DRY</th>
<th>1 hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>*DRY TO RECOAT / OVERCOAT</td>
<td>4 hours</td>
</tr>
</tbody>
</table>
| FULLY CURED             | 1. The product cures by a gradual rise in temperature. The following cure schedule is recommended:  
                           - 30 minutes gradual rise to 100°C  
                           - 1 hour gradual rise to 200°C  
                           - 2 hour rise to 400°C |

*With same generic type paint.*
ADVANTAGES

NATIONAL ALUMINIUM H.R. 400°C
Single pack, aluminium paint based on silicon resin, with good flow properties. The fully cured film has good hardness and resistance up to 400°C.

APPLICATION INSTRUCTION

SURFACE PREPARATION
Surface is to be blast cleaned to Sa2.5 to obtain maximum heat resistance.

APPLICATION DATA

APPLICATION METHOD
Airless Spray
Conventional Spray
Brush
CLEANING/THINNING
National G.P. Thinner
THINNER (VOLUME)
Ready to use
CONV. SPRAY REQUIREMENTS
Atomizing Pressure : 40 psi
AIRLESS SPRAY REQUIREMENTS
Pressure: 2200 psi
NOZZLE SIZE
0.016” – 0.018”
MIXING RATIO (BY VOLUME)
Not applicable
POT LIFE @ 30°C (100 ml)
Not applicable

SYSTEM

RECOMMENDED SYSTEM
To be applied on prepared surface.
No. of Coats x DFT (Microns)
National Aluminium H.R. 400°C : 2 x 30

ADDITIONAL DATA

SHELF LIFE @ 30°C
6 months, in original sealed container, with proper storage conditions.

HEALTH & SAFETY

SAFETY PRECAUTIONS
As a general rule, avoid skin and eye contact by wearing overalls, gloves, goggles, and airmask etc. Spillage on skin should immediately be removed by thorough washing with water and soap or suitable cleaner. Eye should be flushed with fresh water. Avoid inhalation of vapours and paint mist by wearing suitable airmask. In the event of ingestion and eye contact, seek medical attention immediately. Painting must be carried out in well-ventilated area. This as industrial product contains flammable materials and should be kept away from the sparks and open flames, smoking in the area should not be permitted. Local safety regulations should be followed.
### STORAGE & HANDLING

| STORAGE | Store the paint in proper storage conditions as per the local regulations. Keep the paint container in sealed condition under shed, away from direct sunlight and extreme temperatures. Do not stock paint material near to any ignition sources. Do not put back the half or unused material back in original container, containing the supplied paint, to avoid contamination. Handle with care. Stir well before use. |

**NOTE:** We warranty only the quality of our product and this data sheet is based on results obtained from experience and tests. We reserve the right to change data without prior notice. For surface preparation, safety details refer specifier and safety data.

This data sheet supersedes all previous issued.  
Issued: 0608