SIGMASHIELD™ 610

DESCRIPTION
Two-component, amide-cured epoxy coating

PRINCIPAL CHARACTERISTICS
• Specialized coating for use under SIGMAGLIDE fouling release system
• Excellent water resistance
• Good impact resistance

COLOR AND GLOSS LEVEL
• Redbrown, blue
• Eggshell

BASIC DATA AT 20°C (68°F)

<table>
<thead>
<tr>
<th>Data for mixed product</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of components</td>
<td>Two</td>
</tr>
<tr>
<td>Mass density</td>
<td>1.3 kg/l (10.8 lb/US gal)</td>
</tr>
<tr>
<td>Volume solids</td>
<td>57 ± 2%</td>
</tr>
<tr>
<td>VOC (Supplied)</td>
<td>Directive 1999/13/EC, SED: max. 331.0 g/kg max. 437.0 g/l (approx. 3.6 lb/US gal)</td>
</tr>
<tr>
<td>Recommended dry film thickness</td>
<td>150 µm (6.0 mils)</td>
</tr>
<tr>
<td>Theoretical spreading rate</td>
<td>3.8 m²/l for 150 µm (152 ft²/US gal for 6.0 mils)</td>
</tr>
<tr>
<td>Dry to touch</td>
<td>2 hours</td>
</tr>
<tr>
<td>Overcoating Interval</td>
<td>Minimum: 6 hours Maximum: 5 days</td>
</tr>
<tr>
<td>Full cure after</td>
<td>4 days</td>
</tr>
<tr>
<td>Shelf life</td>
<td>Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry</td>
</tr>
</tbody>
</table>

Notes:
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions
• Previous coat must be dry and free from any contamination
Substrate temperature and application conditions

- Substrate temperature during application and curing should be between 10°C (50°F) and 20°C (68°F)
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 80:20 (4:1)

- The temperature of the mixed base and hardener should be above 10°C (50°F), otherwise extra thinner may be required to obtain application viscosity
- Adding too much thinner results in reduced sag resistance
- Thinner should be added after mixing the components

Induction time
None

Pot life
4 hours

Note: See ADDITIONAL DATA – Pot life

Air spray

Recommended thinner
THINNER 91-92

Volume of thinner
0 - 10%, depending on required thickness and application conditions

Nozzle orifice
1.5 – 2.0 mm (approx. 0.060 – 0.079 in)

Nozzle pressure
0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 p.s.i.)
SIGMASHIELD™ 610

Airless spray

Recommended thinner
THINNER 91-92

Volume of thinner
0 - 10%, depending on required thickness and application conditions

Nozzle orifice
Approx. 0.53 – 0.69 mm (0.021 – 0.027 in)

Nozzle pressure
15.0 MPa (approx. 150 bar; 2176 p.s.i.)

Brush/roller

Recommended thinner
THINNER 91-92

Volume of thinner
0 – 5%

Cleaning solvent
THINNER 90-53

ADDITIONAL DATA

<table>
<thead>
<tr>
<th>Overcoating interval for DFT up to 150 µm (6.0 mils)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcoating with...</td>
</tr>
<tr>
<td>SIGMAGLIDE 790</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Note: Surface should be dry and free from any contamination

<table>
<thead>
<tr>
<th>Curing time for DFT up to 150 µm (6.0 mils)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substrate temperature</td>
</tr>
<tr>
<td>10°C (50°F)</td>
</tr>
<tr>
<td>15°C (59°F)</td>
</tr>
<tr>
<td>20°C (68°F)</td>
</tr>
</tbody>
</table>

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)
### Pot life (at application viscosity)

<table>
<thead>
<tr>
<th>Mixed product temperature</th>
<th>Pot life</th>
</tr>
</thead>
<tbody>
<tr>
<td>10°C (50°F)</td>
<td>7 hours</td>
</tr>
<tr>
<td>20°C (68°F)</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

### SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

### WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

### REFERENCES

- EXPLANATION TO PRODUCT DATA SHEETS
- SAFETY INDICATIONS
- SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD
- SAFE WORKING IN CONFINED SPACES
- DIRECTIVES FOR VENTILATION PRACTICE
- CLEANING OF STEEL AND REMOVAL OF RUST
- PPG PROTECTIVE & MARINE COATINGS’ GENERAL WORKING PROCEDURES FOR APPLICATION OF SIGMAGLIDE®

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