DESCRIPTION
Two-component, high solids glass flake reinforced polyamine adduct epoxy coating

PRINCIPAL CHARACTERISTICS
- Excellent abrasion and impact resistance
- Suitable for use on ice-going vessels
- Excellent resistance to corrosion
- Long-term protection at areas subject to heavy wear and tear
- Resistant to splash and spillage of a wide range of chemicals
- Very low water permeability, due to glass flake barrier

COLOR AND GLOSS LEVEL
- Black (other (light) colors on request)
- Gloss

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>1.5 kg/l (12.5 lb/US gal)</td>
</tr>
<tr>
<td>Volume solids</td>
<td>81 ± 2%</td>
</tr>
<tr>
<td>VOC (Supplied)</td>
<td>Directive 1999/13/EC, SED: max. 165.0 g/kg max. 246.0 g/l (approx. 2.1 lb/US gal)</td>
</tr>
<tr>
<td>Recommended dry film thickness</td>
<td>250 - 400 μm (10.0 - 16.0 mils) depending on system</td>
</tr>
<tr>
<td>Theoretical spreading rate</td>
<td>3.2 m²/l for 250 μm (130 ft²/US gal for 10.0 mils) 2.0 m²/l for 400 μm (81 ft²/US gal for 16.0 mils)</td>
</tr>
<tr>
<td>Dry to touch</td>
<td>3 hours</td>
</tr>
<tr>
<td>Overcoating Interval</td>
<td>Minimum: 16 hours Maximum: 28 days</td>
</tr>
<tr>
<td>Full cure after</td>
<td>5 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 – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time
RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

**Substrate conditions**
- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Previous coat must be dry and free from any contamination

**IMO-MSC.215(82) requirements for water ballast tanks**
- Dust quantity rating "1 for dust size class "3", "4" or "5", lower dust size classes to be removed if visible on the surface to be coated without magnification (ISO 8502-3:1992)

**Substrate temperature and application conditions**
- Substrate temperature during application and curing should be above 5°C (41°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 75:25 (3:1)**
- The temperature of the paint should preferably be above 15°C (59°F), otherwise extra thinner may be required to obtain application viscosity
- Adding too much thinner results in reduced sag resistance and slower cure
- Very good mechanical mixing of base and hardener is essential
- Thinner should be added after mixing the components
- Filters should be removed from spray equipment

**Induction time**
None

**Pot life**
1.5 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life
Air spray

Recommended thinner
THINNER 91-92

Volume of thinner
5 - 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.)

Airless spray

Recommended thinner
THINNER 91-92

Volume of thinner
0 - 5%, depending on required thickness and application conditions

Nozzle orifice
Approx. 0.53 – 0.79 mm (0.021 – 0.031 in)

Nozzle pressure
19.0 - 22.5 MPa (approx. 190 - 225 bar; 2756 - 3264 p.s.i.)

Brush/roller
• Brush application only
• Only for touch-up and repair
• Due to thixotropy, it is difficult to obtain a smooth film by brush, although this does not affect performance

Cleaning solvent
THINNER 90-53
ADDITIONAL DATA

<table>
<thead>
<tr>
<th>Spreading rate and film thickness</th>
<th>Theoretical spreading rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFT 250 µm (10.0 mils)</td>
<td>3.2 m²/l (130 ft²/US gal)</td>
</tr>
<tr>
<td>DFT 400 µm (16.0 mils)</td>
<td>2.0 m²/l (81 ft²/US gal)</td>
</tr>
</tbody>
</table>

Notes:
- Maximum DFT when brushing: 80 µm (3.1 mils)
- Maximum recommended dft for complex structures is 250 µm (10.0 mils)

Overcoating interval for DFT up to 400 µm (16.0 mils)

<table>
<thead>
<tr>
<th>Overcoating with...</th>
<th>Interval</th>
<th>5°C (41°F)</th>
<th>10°C (50°F)</th>
<th>20°C (68°F)</th>
<th>30°C (86°F)</th>
<th>40°C (104°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>itself</td>
<td>Minimum</td>
<td>48 hours</td>
<td>32 hours</td>
<td>16 hours</td>
<td>12 hours</td>
<td>8 hours</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>28 days</td>
<td>28 days</td>
<td>28 days</td>
<td>14 days</td>
<td>7 days</td>
</tr>
</tbody>
</table>

Curing time for DFT up to 400 µm (16.0 mils)

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>Dry to touch</th>
<th>Dry to handle</th>
<th>Service-water immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>5°C (41°F)</td>
<td>16 hours</td>
<td>30 hours</td>
<td>14 days</td>
</tr>
<tr>
<td>10°C (50°F)</td>
<td>8 hours</td>
<td>16 hours</td>
<td>10 days</td>
</tr>
<tr>
<td>20°C (68°F)</td>
<td>3 hours</td>
<td>8 hours</td>
<td>5 days</td>
</tr>
<tr>
<td>30°C (86°F)</td>
<td>2 hours</td>
<td>5 hours</td>
<td>4 days</td>
</tr>
<tr>
<td>40°C (104°F)</td>
<td>1 hour</td>
<td>3 hours</td>
<td>3 days</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>3 hours</td>
</tr>
<tr>
<td>20°C (68°F)</td>
<td>1.5 hours</td>
</tr>
<tr>
<td>30°C (86°F)</td>
<td>45 minutes</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
- CONVERSION TABLES
- 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
- SPECIFICATION FOR MINERAL ABRASIVES
- RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE

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