# SIGMAGUARD™ 730

## DESCRIPTION

Two-component, high solids polyamine cured phenolic epoxy coating

## PRINCIPAL CHARACTERISTICS

- Tank coating with good chemical resistance against a wide range of chemicals
- Meets the requirements of EI 1541 2.2 (coating systems for aviation fuel storage tanks and pipes)
- Short curing periods
- Good low-temperature curing
- Easy to clean

## COLOR AND GLOSS LEVEL

- Offwhite, cream
- Gloss

## BASIC DATA AT 20°C (68°F)

| Data for mixed product | |
|---|---|
| **Number of components** | Two |
| **Mass density** | 1.4 kg/l (11.7 lb/US gal) |
| **Volume solids** | 78 ± 2% |
| **VOC (Supplied)** | Directive 2010/75/EU, SED: max. 169.0 g/kg<br>max. 242.0 g/l (approx. 2.0 lb/US gal) |
| **Recommended dry film thickness** | 150 µm (6.0 mils) |
| **Theoretical spreading rate** | 5.2 $m^2$/l for 150 µm (209 $ft^2$/US gal for 6.0 mils) |
| **Dry to touch** | 3 hours |
| **Overcoating Interval** | Minimum: 8 hours<br>Maximum: 28 days |
| **Full cure after** | See curing table |
| **Shelf life** | Base: at least 12 months when stored cool and dry<br>Hardener: at least 24 months when stored cool and dry |

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 a minimum of ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Previous coat of approved coating must be dry and free from any contamination

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**Substrate temperature and application conditions**

- Substrate temperature during application and curing should be above 5°C (41°F)
- Substrate temperature during application 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 mixed base and hardener 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
- Thinner should be added after mixing the components

**Induction time**

Allow induction time before use

| Mixed product induction time | |
|---|---|
| **Mixed product temperature** | **Induction time** |
| 15°C (59°F) | 15 minutes |
| 20°C (68°F) | 10 minutes |
| 25°C (77°F) | 5 minutes |

**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 - 15% for a one coat application of 150 µm (6.0 mils) DFT

**Nozzle orifice**

1.8 – 2.0 mm (approx. 0.070 – 0.079 in)

**Nozzle pressure**

0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 p.s.i.)

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**Airless spray**

**Recommended thinner**
THINNER 91-92

**Volume of thinner**
0 - 10% for a one coat application of 150 µm (6.0 mils) DFT

**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**

- For stripe coating and spot repair only

**Cleaning solvent**
THINNER 90-53

## ADDITIONAL DATA

| Spreading rate and film thickness | |
|---|---|
| **DFT** | **Theoretical spreading rate** |
| 125 µm (5.0 mils) | 6.2 $m^2$/l (250 $ft^2$/US gal) |
| 150 µm (6.0 mils) | 5.2 $m^2$/l (209 $ft^2$/US gal) |

Note: Maximum DFT when brushing: 100 µm (4.0 mils)

| Overcoating interval for DFT up to 150 µm (6.0 mils) | | | | | | |
|---|---|---|---|---|---|---|
| **Overcoating with...** | **Interval** | **5°C (41°F)** | **10°C (50°F)** | **20°C (68°F)** | **30°C (86°F)** | **40°C (104°F)** |
| itself | Minimum | 32 hours | 24 hours | 8 hours | 4 hours | 3 hours |
| | Maximum | 28 days | 28 days | 28 days | 14 days | 7 days |

Note: Surface should be dry and free from any contamination

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| Curing time for DFT up to 150 µm (6.0 mils) | | |
|---|---|---|
| **Substrate temperature** | **Minimum curing time before transport of aliphatic petroleum products and ballast water and tanktest with seawater** | **Minimum curing time before transport of cargoes without note 4, 7, 8 or 11** |
| 5°C (41°F) | 10 days | 17 days |
| 10°C (50°F) | 7 days | 14 days |
| 20°C (68°F) | 3 days | 5 days |
| 30°C (86°F) | 60 hours | 4 days |
| 40°C (104°F) | 36 hours | 3 days |

Notes:
- Minimum curing time before transport of cargoes with note 4,7,8 or 11: 3 months
- For detailed information on resistance and resistance notes, please refer to the latest issue of the cargo resistance list
- Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

| Pot life (at application viscosity) | |
|---|---|
| **Mixed product temperature** | **Pot life** |
| 15°C (59°F) | 3 hours |
| 20°C (68°F) | 1.5 hours |
| 25°C (77°F) | 1 hour |
| 30°C (86°F) | 30 minutes |

## 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.

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## REFERENCES

| | | |
|---|---|---|
| • CONVERSION TABLES | INFORMATION SHEET | 1410 |
| • EXPLANATION TO PRODUCT DATA SHEETS | INFORMATION SHEET | 1411 |
| • SAFETY INDICATIONS | INFORMATION SHEET | 1430 |
| • SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD | INFORMATION SHEET | 1431 |
| • SAFE WORKING IN CONFINED SPACES | INFORMATION SHEET | 1433 |
| • DIRECTIVES FOR VENTILATION PRACTICE | INFORMATION SHEET | 1434 |
| • CLEANING OF STEEL AND REMOVAL OF RUST | INFORMATION SHEET | 1490 |
| • SPECIFICATION FOR MINERAL ABRASIVES | INFORMATION SHEET | 1491 |
| • RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE | INFORMATION SHEET | 1650 |

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