PPG SIGMAGUARD™ 730 CONDUCTIVE

DESCRIPTION

Two-component, high solids polyamine cured conductive phenolic epoxy coating

PRINCIPAL CHARACTERISTICS

- Conductive phenolic epoxy coating in protective coating systems for the inside protection of steel tanks for liquid fuel
- Good adhesion to steel
- Good water and corrosion resistance
- Good low-temperature curing
- Complies with GB50393

COLOR AND GLOSS LEVEL

- Redbrown, light gray
- Semi-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 max. 242.0 g/l (approx. 2.0 lb/US gal)
Recommended dry film thickness	100 - 150 µm (4.0 - 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 Maximum: 28 days
Shelf life	Base: at least 12 months when stored cool and dry 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

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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

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

SYSTEM SPECIFICATION

- 2 layers of 100 to 150 µm (4.0 mils to 6.0 mils)

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 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

Pot life

2.25 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**
100 µm (4.0 mils)	7.8 m^2/l (313 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	**Dry to touch**	**Full cure**
5°C (41°F)	12 hours	21 days
10°C (50°F)	6 hours	14 days
20°C (68°F)	3 hours	7 days
30°C (86°F)	1.5 hours	5 days
40°C (104°F)	30 minutes	4 days

Pot life (at application viscosity)	
Mixed product temperature	**Pot life**
15°C (59°F)	3 hours
20°C (68°F)	2.25 hours
25°C (77°F)	1.75 hour
30°C (86°F)	1 hour

SAFETY PRECAUTIONS

- 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
- See Safety Data Sheet and product label for complete safety and precaution requirements

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & 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

- Information sheet | Explanation of product data sheets

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