DESCRIPTION

Two-component, high-build polyamide cured epoxy primer/coating based upon pure epoxy technology

PRINCIPAL CHARACTERISTICS

- Surface tolerant primer/coating for wide use in Marine and Protective Coatings
- · Marine use: suitable on topsides, decks, superstructures and cargo holds
- Excellent corrosion resistance
- Compatible with various aged coatings
- Suitable as floor coating for pedestrian traffic with dry to walk on time of 6 hours at 20°C (68°F)
- Good impact and abrasion resistance
- Smooth film, easy to clean
- · Resistant to splash and spillage of a wide range of chemicals

COLOR AND GLOSS LEVEL

- Standard and custom colors, including aluminum
- For Cargo holds gray (5177) and redbrown (6179) only
- Semi-gloss

Notes:

- Epoxy coatings will chalk and fade upon exposure to sunlight, elevated temperatures, or chemical exposure. Discoloration and normal chalking do not impact performance. Light colors will darken over time. Some batch-to-batch variation in color is to be expected. Color matches are approximate.
- The addition of a UV stable topcoat should be considered when using epoxy coatings in cosmetic areas

Data for mixed product				
Number of components	Two			
Mass density	1.4 kg/l (11.7 lb/US gal)			
Volume solids	72 ± 2%			
VOC (Supplied)	Directive 2010/75/EU, SED: max. 263.0 g/kg max. 361.0 g/l (approx. 3.0 lb/US gal) China GB 30981-2020 (tested) 299.0 g/l (approx. 2.5 lb/gal)			
Recommended dry film thickness	100 - 150 µm (4.0 - 6.0 mils) for airless spray			
Theoretical spreading rate	5.8 m²/l for 125 μm (231 ft²/US gal for 5.0 mils) 4.8 m²/l for 150 μm (192 ft²/US gal for 6.0 mils)			
Dry to touch	2 hours			
Overcoating Interval	Minimum: 6 hours See overcoating tables			
Full cure after	7 days			

BASIC DATA AT 20°C (68°F)



Data for mixed product	
	Base: at least 24 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

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to ISO-Sa2½ for excellent corrosion protection, blasting profile 40 70 μm (1.6 2.8 mils)
- Steel; blast cleaned to ISO-Sa2, blasting profile 40 70 μm (1.6 2.8 mils) or power tool cleaned to minimum ISO-St2 for
- good corrosion protection
- Coated steel; hydrojetted to VIS WJ2/3L
- Surface must be dry and free from any contamination
- Existing sound epoxy systems and most sound alkyd coating system; sufficiently roughened

Substrate conditions of concrete for thinned version

- Dried for at least 28 days in good ventilation conditions
- Moisture content should not exceed 4.5%
- Concrete must be sound, dry, free from laitance and any contamination
- Rough surface; eventually abraded by power tool or diamond abrading tool

Coated concrete

- Existing sound coating systems; sufficiently roughened, dry and cleaned
- To ensure compatibility, rub the existing coating with a cloth with Xylene or MEK for 10 seconds, and remove existing coatings if dissolving occurs
- Rough surface; eventually abraded by power tool or diamond abrading tool

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

SYSTEM SPECIFICATION

• SIGMACOVER 350: 2 x 125 μm (5.0 mils) DFT



INSTRUCTIONS FOR USE

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

- 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
- Thinner should be added after mixing the components

Induction time

None

Pot life 3 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 1.8 – 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.)

Airless spray

Recommended thinner THINNER 91-92

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

Nozzle orifice Approx. 0.48 – 0.53 mm (0.019 – 0.021 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%

Note: 10 - 15% when applied as a primer direct to concrete

Cleaning solvent

THINNER 90-53

ADDITIONAL DATA

Spreading rate and film thickness				
DFT	Theoretical spreading rate			
100 µm (4.0 mils)	7.2 m²/l (289 ft²/US gal)			
125 µm (5.0 mils)	5.8 m²/l (231 ft²/US gal)			
150 µm (6.0 mils)	4.8 m²/l (192 ft²/US gal)			

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

Overcoating interval for DFT up to 150 μm (6.0 mils) For application in atmospheric exposure and industrial PC						
						Overcoating with
itself and various two- pack epoxy coatings	Minimum	16 hours	9 hours	6 hours	4 hours	3 hours
	Maximum	Extended	Extended	Extended	Extended	Extended
polyurethanes	Minimum	48 hours	30 hours	18 hours	9 hours	5 hours
	Maximum	6 months	5 months	2.5 months	1.5 months	14 days
various single pack coatings (such as alkyds and acrylics)	Minimum	24 hours	24 hours	16 hours	8 hours	5 hours
	Maximum	14 days	14 days	14 days	7 days	4 days

Notes:

- Actual maximum overcoating times will be influenced by local conditions
- A detergent wash with PREP 88 or equivalent is recommended prior to application of topcoats after 30 days of exposure if chalking or contamination is present
- To ensure optimal adhesion of the next coat, the surface must be dry and free from all contaminations (oil, grease, chalking, etc...) which would require cleaning and/or abrading



Overcoating interval for DFT up to 150 μm (6.0 mils) For application in cargo holds, on decks and marine areas subject to non-permanent splash and spillage of seawater and/or chemicals						
						Overcoating with
itself and various two-	Minimum	16 hours	9 hours	6 hours	4 hours	3 hours
pack epoxy coatings	Maximum	1 month	1 month	21 days	14 days	7 days
polyurethanes	Minimum	48 hours	30 hours	18 hours	9 hours	5 hours
	Maximum	1 month	21 days	14 days	7 days	3 days

Curing time for DFT up to 150 μm (6.0 mils)				
Substrate temperature	Dry to touch	Dry to handle	Full cure	
5°C (41°F)	12 hours	16 hours	25 days	
10°C (50°F)	6 hours	9 hours	15 days	
20°C (68°F)	2 hours	6 hours	7 days	
30°C (86°F)	1 hour	4 hours	4 days	
40°C (104°F)	1 hour	3 hours	48 hours	

Notes:

- For cargo hold application: for full cure for hard angular cargoes, please contact your nearest PPG Protective & Marine Coatings sales office
- Adequate ventilation must be maintained during application and curing
- Should SIGMACOVER 350 or the total coating system (2 x 125 μm/2 x 5.0 mils) be applied in excess of the specified dry film thickness, then the time necessary to reach full cure will be increased

Pot life (at application viscosity)		
Mixed product temperature	Pot life	
15°C (59°F)	4 hours	
20°C (68°F)	3 hours	
30°C (86°F)	2 hours	
40°C (104°F)	1 hour	

SAFETY PRECAUTIONS

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

INFORMATION SHEET 1411

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