SIGMACOVER™ 295

DESCRIPTION

Two-component, polyamide-cured epoxy primer

PRINCIPAL CHARACTERISTICS

- General-purpose epoxy primer in protective coating systems for steel
- Good adhesion to steel and galvanized steel
- Good flow- and wetting properties
- Good water- and corrosion resistance
- Suitable for touching up of weld seams and damages of epoxy coatings during construction
- Unlimited recoating intervals are possible when overcoating with epoxy coatings
- Can be overcoated with most alkyd-, chlorinated rubber-, vinyl-, epoxy- and two-component polyurethane coatings
- Suitable on wet blast cleaned substrates (damp or dry)
- Compatible with well-designed cathodic protection systems

COLOR AND GLOSS LEVEL

- Redbrown, yellow/green
- Eggshell

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.5 kg/l (12.5 lb/US gal)
Volume solids	55 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 292.0 g/kg max. 436.0 g/l (approx. 3.6 lb/US gal)
Recommended dry film thickness	50 - 125 µm (2.0 - 5.0 mils) depending on system
Theoretical spreading rate	11.0 m^2/l for 50 µm (441 ft^2/US gal for 2.0 mils) 5.5 m^2/l for 100 µm (221 ft^2/US gal for 4.0 mils)
Dry to touch	2 hours
Overcoating Interval	Minimum: 16 hours
Full cure after	7 days
Shelf life	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

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RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Immersion exposure

- Steel; blast cleaned (dry or wet) to Iso-2½, blasting profile 50 – 75 µm (2.0 – 3.0 mils)
- Steel with approved zinc silicate shop primer pretreated according to SPSS or power tool cleaned to SPSS-Pt3

IMO-MSC.215(82) requirements for water ballast tanks

- Steel; ISO 8501-3: 2006 grade P2, with all edges treated to a rounded radius of minimum 2 mm (0.0789 in) or subject to three pass grinding
- Steel or steel with not approved zinc silicate shop primer; blast cleaned to ISO -Sa2½, blasting profile 30 – 75 µm (1.2 – 3.0 mils)
- Steel with approved zinc silicate shop primer; weld seams and areas of shop primer damage or break down should be blast cleaned to Iso-Sa 2½ blasting profile 30 – 75 µm (1.2 – 3.0 mils): [1] For shop primer with IMO type approval; no additional requirements; [2] For shop primer without IMO type approval; blast cleaned to ISO-Sa2 removing at least 70% of intact shop primer
- 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)

Atmospheric exposure conditions

- Steel; pretreated preferably to ISO-Sa2½ or according to ISO-St3
- Shop primed steel; pretreated to SPSS-Pt3

Substrate temperature and application conditions

- Substrate temperature during application and curing should be above -5°C (23°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 mixed base and hardener should preferably be above 15°C (59°F)
- Adding too much thinner results in reduced sag resistance and slower cure
- Thinner should be added after mixing the components

Induction time

None

Pot life

12 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

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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.)

Airless spray

Recommended thinner
THINNER 91-92

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

Nozzle orifice
Approx. 0.46 mm (0.018 in)

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

Brush/roller

Recommended thinner
No extra thinner is necessary

Volume of thinner
Up to 5% THINNER 91-92 can be added if desired

Cleaning solvent
THINNER 90-53

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ADDITIONAL DATA

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
50 µm (2.0 mils)	11.0 m^2/l (441 ft^2/US gal)
75 µm (3.0 mils)	7.3 m^2/l (294 ft^2/US gal)
100 µm (4.0 mils)	5.5 m^2/l (221 ft^2/US gal)

Note: Maximum DFT when brushing: 50 µm (2.0 mils)

Overcoating interval for DFT up to 125 µm (5.0 mils)							
Overcoating with...	**Interval**	**-5°C (23°F)**	**5°C (41°F)**	**10°C (50°F)**	**20°C (68°F)**	**30°C (86°F)**	**40°C (104°F)**
various two-pack epoxy coatings	Minimum	48 hours	24 hours	16 hours	8 hours	4 hours	2 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Two-component polyurethane coatings	Minimum	4 days	48 hours	32 hours	16 hours	8 hours	4 hours
	Maximum	30 days	30 days	21 days	10 days	7 days	4 days

Notes:
- Surface should be dry and free from any contamination before recoating
- An additional surface cleaning will be required when the surface is exposed for some time to direct sunlight
- Glossy finishes require a corresponding undercoat

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)	8 hours	13 hours	21 days
10°C (50°F)	4 hours	6 hours	14 days
20°C (68°F)	2 hours	3 hours	7 days
30°C (86°F)	1 hour	2 hours	5 days
40°C (104°F)	30 minutes	1 hour	3 days

Note: 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**
10°C (50°F)	18 hours
20°C (68°F)	12 hours
30°C (86°F)	6 hours
40°C (104°F)	3 hours

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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	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

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Depending on specific country of application the following versions are available:

Article code	Color	Reference
249257	redbrown	2008002150 (249255 base, 249256 hardener)

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