SIGMACOVER™ 620

DESCRIPTION

Two-component, surface-tolerant, high-build, polyamide-cured epoxy primer/coating

PRINCIPAL CHARACTERISTICS

- Excellent corrosion resistance
- Good flexibility
- Surface tolerant coating for lower grade of steel preparation
- Good drying and curing property
- Easy application by different application methods such as airless spray, brush etc.
- Low temperature version available if required

COLOR AND GLOSS LEVEL

- Gray, off-white (other colors available on request)
- Aluminum colors (dark gray, light gray)
- 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	80 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 150.0 g/kg UK PG 6/23(92) Appendix 3: max. 225.0 g/l (approx. 1.9 lb/US gal)
Recommended dry film thickness	75 - 250 µm (3.0 - 10.0 mils) depending on system
Theoretical spreading rate	6.4 m^2/l for 125 µm (257 ft^2/US gal for 5.0 mils)
Dry to touch	3 hours
Overcoating Interval	Minimum: 8 hours Maximum: 6 months
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

Atmospheric exposure conditions

- Steel; blast cleaned to ISO-Sa2½ for excellent corrosion protection
- Steel; blast cleaned to ISO-Sa2 or power tool cleaned to ISO-St2 for good corrosion protection
- Shop primed steel; pretreated to SPSS-Pt2
- Galvanized steel; sweep blasted to roughen the surface and to remove any zinc salts which might be present

Immersion exposure

- Steel; blast cleaned to ISO-Sa2½
- Steel with approved zinc silicate shop primer; sweep blasted to SPSS-Ss or power tool cleaned to SPSS-Pt3

Substrate temperature

- 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 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 and slower cure
- Thinner should be added after mixing the components

Induction time

Mixed product induction time	
Mixed product temperature	**Induction time**
Above 10°C (50°F)	None

Pot life

4 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

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Airless spray

Recommended thinner
THINNER 91-92

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

Nozzle orifice
Approx. 0.46 – 0.53 mm (0.018 – 0.021 in)

Nozzle pressure
20.0 - 25.0 MPa (approx. 200 - 250 bar; 2901 - 3626 p.s.i.)

Brush/roller

- Application by roller will leave roller marking and is suitable for minimum DFT requirements only
- A roller suitable for epoxy application must be used

Recommended thinner
THINNER 91-92

Volume of thinner
0 – 5%

Cleaning solvent
THINNER 90-53

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
75 µm (3.0 mils)	10.7 m^2/l (428 ft^2/US gal)
100 µm (4.0 mils)	8.0 m^2/l (321 ft^2/US gal)
125 µm (5.0 mils)	6.4 m^2/l (257 ft^2/US gal)
150 µm (6.0 mils)	5.3 m^2/l (214 ft^2/US gal)
200 µm (8.0 mils)	4.0 m^2/l (160 ft^2/US gal)

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Overcoating interval for DFT up to 125 µm (5.0 mils): Atmospheric exposure						
Overcoating with...	**Interval**	**5°C (41°F)**	**10°C (50°F)**	**20°C (68°F)**	**30°C (86°F)**	**40°C (104°F)**
various two-pack epoxy and polyurethane coatings	Minimum	48 hours	24 hours	8 hours	4 hours	2 hours
	Maximum exposed to direct sunshine	3 months	3 months	3 months	3 months	3 months
	Maximum NOT exposed to direct sunshine	6 months	6 months	6 months	6 months	6 months

Note: Surface should be dry and free from any contamination and sufficiently roughened after long exposure

Overcoating interval for DFT up to 125 µm (5.0 mils): Immersion exposure						
Overcoating with...	**Interval**	**5°C (41°F)**	**10°C (50°F)**	**20°C (68°F)**	**30°C (86°F)**	**40°C (104°F)**
various two-pack epoxy and polyurethane coatings	Max recoat immersion minimum interval	48 hours	24 hours	8 hours	4 hours	2 hours
	Max recoat immersion maximum interval	2 months	2 months	2 months	2 months	2 months

Note: Surface should be dry and free from any contamination and sufficiently roughened after long exposure

Curing time for DFT up to 125 µm (5.0 mils)			
Substrate temperature	**Dry to touch**	**Dry to handle**	**Full cure**
5°C (41°F)	24 hours	48 hours	20 days
10°C (50°F)	12 hours	24 hours	14 days
20°C (68°F)	3 hours	8 hours	7 days
30°C (86°F)	2 hours	6 hours	4 days
40°C (104°F)	1 hour	3 hours	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)	10 hours
15°C (59°F)	6 hours
20°C (68°F)	4 hours
30°C (86°F)	2 hours
40°C (104°F)	1 hour

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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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