

SIGMACOVER™ 630 LT

DESCRIPTION

Two-component, surface tolerant high solids polyamine cured epoxy primer/coating

PRINCIPAL CHARACTERISTICS

- Self priming coating tolerant to lower grades of steel preparation for atmospheric exposure
- Cures at temperatures down to -5°C (23°F)
- Particularly well-suited as maintenance coating for steel structures
- Excellent corrosion resistance
- Resistant to splash and spillage of a wide range of chemicals
- Good abrasion resistance
- Good flexibility
- Compatible with various aged coatings
- Good recoatability with most epoxy, polyurethane, chlorinated rubber, alkyd and acrylic paints

COLOR AND GLOSS LEVEL

- Gray, off-white (other colors available on request)
- Gloss

BASIC DATA AT 10°C (50°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	83 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 190.0 g/kg UK PG 6/23(92) Appendix 3: max. 268.0 g/l (approx. 2.2 lb/US gal)
Recommended dry film thickness	60 - 150 µm (2.4 - 6.0 mils)
Theoretical spreading rate	13.8 m ² /l for 60 µm (555 ft ² /US gal for 2.4 mils) 5.5 m ² /l for 150 µm (222 ft ² /US gal for 6.0 mils)
Dry to touch	12 hours
Overcoating Interval	Minimum: 16 hours Maximum: 2 months
Full cure after	7 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

SIGMACOVER™ 630 LT

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to ISO-Sa2½ for excellent corrosion protection
- Steel; blast cleaned to ISO-Sa2, blasting profile 40 – 70 µm (1.6 – 2.8 mils) or power tool cleaned to ISO-St2 for good corrosion protection
- Shop primed steel; pretreated to SPSS-Pt3
- Existing sound coating systems; sufficiently roughened, dry and cleaned

Substrate temperature

- Substrate temperature during application and curing down to -5°C (23°F) is acceptable; provided the substrate is free from ice and dry
- 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 83:17

- Adding too much thinner results in reduced sag resistance and slower cure
- The temperature of the mixed base and hardener should be above 10°C (50°F), otherwise extra thinner may be required to obtain application viscosity
- Thinner should be added after mixing the components

Induction time

Mixed product induction time	
Mixed product temperature	Induction time
Below 10°C (50°F)	15 minutes

Pot life

2 hours at 10°C (50°F)

Note: See ADDITIONAL DATA – Pot life



SIGMACOVER™ 630 LT

Air spray

Recommended thinner

THINNER 91-92

Volume of thinner

10 - 15%, 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

5 - 10%, 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 or THINNER 91-99 for better flow

Volume of thinner

5 - 10%

Cleaning solvent

THINNER 90-53



SIGMACOVER™ 630 LT

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
60 µm (2.4 mils)	13.8 m ² /l (555 ft ² /US gal)
100 µm (4.0 mils)	8.3 m ² /l (333 ft ² /US gal)
150 µm (6.0 mils)	5.5 m ² /l (222 ft ² /US gal)

Overcoating interval for DFT up to 150 µm (6.0 mils)						
Overcoating with...	Interval	-5°C (23°F)	0°C (32°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)
various two-component epoxy coatings	Minimum	48 hours	24 hours	20 hours	16 hours	8 hours
	Maximum	2 months	2 months	2 months	2 months	2 months
polyurethanes	Minimum	4 days	64 hours	36 hours	24 hours	16 hours
	Maximum	1 month	1 month	1 month	1 month	1 month

Notes:

- Surface should be dry and free from any contamination
- Best intercoat adhesion occurs when the subsequent coat is applied before the preceding coat is fully cured
- After exceeding of the maximum interval, glossy finishes require a corresponding undercoat
- If this time is exceeded it may be necessary to roughen the surface

Curing time for DFT up to 150 µm (6.0 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
-5°C (23°F)	24 hours	48 hours	21 days
0°C (32°F)	16 hours	24 hours	14 days
5°C (41°F)	14 hours	20 hours	10 days
10°C (50°F)	12 hours	16 hours	7 days
20°C (68°F)	4 hours	8 hours	5 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
0°C (32°F)	3 hours
10°C (50°F)	2 hours
20°C (68°F)	1 hour

SIGMACOVER™ 630 LT

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

• 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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