New Guard Coatings Group

A global reputation to protect.

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This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

SIGMATHERM™ 500

DESCRIPTION

Heat resistant modified alkyd aluminium coating

PRINCIPAL CHARACTERISTICS

- To be used for the internal and external protection of steel surfaces
- Heat-resistant up to 500°C (930°F); a minimum of 200°C (390°F) is necessary to fuse the aluminum coating
- A minimum drying time of 3 days at 20°C (68°F) should be allowed before exposure to heat
- Application by spray improves the appearance

COLOR AND GLOSS LEVEL

- Aluminum
- Eggshell

BASIC DATA AT 20°C (68°F)

Data for product	
Number of components	One
Mass density	1.1 kg/l (9.2 lb/US gal)
Volume solids	32 ± 2%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 561.0 g/kg UK PG 6/23(92) Appendix 3: max. 600.0 g/l (approx. 5.0 lb/US gal)
Recommended dry film thickness	25 µm (1.0 mils)
Theoretical spreading rate	12.8 m^2/l for 25 µm (513 ft^2/US gal for 1.0 mils)
Dry to touch	1 hour
Overcoating Interval	Minimum: 24 hours Maximum: Unlimited
Shelf life	At least 24 months when stored cool and dry

Notes:
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to ISO-Sa2½ or ISO-Sa3, blasting profile 40 – 70 µm (1.6 – 2.8 mils)

Substrate temperature and application conditions

- Substrate temperature during application should be at least 3°C (5°F) above dew point

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INSTRUCTIONS FOR USE

- Stir well before use
- The temperature of the paint 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
- Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

Air spray

Recommended thinner
No thinner should be added

Nozzle orifice
2.0 – 3.0 mm (approx. 0.079 – 0.110 in)

Nozzle pressure
0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 p.s.i.)

Airless spray

Recommended thinner
No thinner should be added

Nozzle orifice
Approx. 0.38 mm (0.015 in)

Nozzle pressure
8.0 - 12.0 MPa (approx. 80 - 120 bar; 1161 - 1741 p.s.i.)

Brush/roller

Recommended thinner
No thinner should be added

Cleaning solvent
THINNER 20-05

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ADDITIONAL DATA

Overcoating interval for DFT up to 25 µm (1.0 mils)				
Overcoating with...	**Interval**	**5°C (41°F)**	**20°C (68°F)**	**30°C (86°F)**
itself	Minimum	48 hours	24 hours	16 hours
	Maximum	Unlimited	Unlimited	Unlimited

Curing time for DFT up to 25 µm (1.0 mils)	
Substrate temperature	**Dry to touch**
5°C (41°F)	3 hours
20°C (68°F)	1 hour
30°C (86°F)	30 minutes

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
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

WARRANTY

SIGMATHERM™ 500

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