

New Guard Coatings Group

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SIGMATHERM™ 350

DESCRIPTION

Heat-resistant silicone/acrylic finish

PRINCIPAL CHARACTERISTICS

- Excellent resistance against weathering
- A minimum drying time of 3 days at 20°C (68°F) should be allowed before exposure to heat
- Heat-resistant up to 350°C (660°F)
- To be used for the internal and external protection of steel surfaces
- Widely compatible with inorganic zinc primers

COLOR AND GLOSS LEVEL

- White, aluminum (other colors available on request)
- Semi-gloss

BASIC DATA AT 20°C (68°F)

Data for product	
Number of components	One
Mass density	White: 1.2 kg/l (10.0 lb/US gal) Aluminum: 1.1 kg/l (9.2 lb/US gal)
Volume solids	White: 39 ± 2% Aluminum: 42 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 492 g/kg (white) Directive 1999/13/EC, SED: max. 491 g/kg (aluminum) max. 590.0 g/l (approx. 4.9 lb/gal) (white) max. 540.0 g/l (approx. 4.5 lb/gal) (aluminum)
Recommended dry film thickness	25 - 30 µm (1.0 - 1.2 mils)
Theoretical spreading rate	White: 15.6 m ² /l for 25 µm (626 ft ² /US gal for 1.0 mils) Aluminum: 16.8 m ² /l for 25 µm (674 ft ² /US gal for 1.0 mils)
Dry to touch	1 hour
Overcoating Interval	Minimum: 18 hours Maximum: Unlimited
Shelf life	At least 24 months when stored cool and dry

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Thermal aluminum sprayed steel or thermal zinc sprayed steel must be dry and free from any contamination
- Suitable coating (zinc silicate primer) must be dry, free from any contamination and zinc salts
- Steel; blast cleaned to a minimum of ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)



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Substrate temperature and application conditions

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

INSTRUCTIONS FOR USE

- By using a mist coat technique, it is possible to apply SIGMATHERM 350 on top of a zinc silicate primer
- Power agitate to uniform consistency

Air spray

Recommended thinner

No thinner should be added

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

No thinner should be added

Nozzle orifice

Approx. 0.38 – 0.48 mm (0.015 – 0.019 in)

Nozzle pressure

12.0 - 15.0 MPa (approx. 120 - 150 bar; 1741 - 2176 p.s.i.)

Brush/roller

- Only for touch-up and spot repair

Cleaning solvent

THINNER 21-06

ADDITIONAL DATA

Spreading rate and film thickness – White	
DFT	Theoretical spreading rate
25 µm (1.0 mils)	15.6 m ² /l (626 ft ² /US gal)
30 µm (1.2 mils)	13.0 m ² /l (521 ft ² /US gal)

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Spreading rate and film thickness – Aluminum

DFT	Theoretical spreading rate
25 µm (1.0 mils)	16.8 m ² /l (674 ft ² /US gal)
30 µm (1.2 mils)	14.0 m ² /l (561 ft ² /US gal)

Overcoating interval for DFT up to 30 µm (1.2 mils)

Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
itself	Minimum	24 hours	18 hours	15 hours	10 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited

Note: Surface should be dry and free from any contamination

Curing time for DFT up to 30 µm (1.2 mils)

Substrate temperature	Dry to touch	Dry to handle
10°C (50°F)	1.5 hours	3 hours
20°C (68°F)	1 hour	2 hours
30°C (86°F)	45 minutes	1.5 hours
40°C (104°F)	30 minutes	1 hour

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

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.



SIGMATHERM™ 350

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

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