

# SIGMATHERM™ 540

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## OVERVIEW

- Place of origin: Indonesia
- Gloss level: Eggshell
- Dry to touch: 45 minutes
- Number of components: 1
- Color: Aluminum and black

## PRODUCT DETAIL

### DESCRIPTION

One-component, heat-resistant, moisture-curing silicone aluminum

### PRINCIPAL CHARACTERISTICS

- Heat-resistant up to 540°C (1000°F) on steel, grit-blasted to SSPC SP10/NACE 2 (ISO-Sa2½)
- Heat-resistant up to 400°C (750°F) on rusted steel, power tool cleaned to ISO-St3
- To be used for the internal and external protection of steel surfaces
- No heat cure necessary between coats
- Excellent resistance against weathering
- Also suitable on top of zinc silicate primer
- A minimum drying time of 3 days at 20°C (68°F) should be allowed before exposure to heat
- Complies with NACE SP0198 for austenitic stainless steels and carbon steels under thermal insulation

### COLOR AND GLOSS LEVEL

- Aluminum and black
- 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	45 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 412.0 g/kg UK PG 6/23(92) Appendix 3: max. 498.0 g/l (approx. 4.2 lb/US gal)
Recommended dry film thickness	25 µm (1.0 mils)
Theoretical spreading rate	18.0 m²/l for 25 µm (722 ft²/US gal for 1.0 mils)
Dry to touch	45 minutes
Overcoating Interval	Minimum: 16 hours
Shelf life	At least 9 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, blasting profile 30 - 75 µm (1.2 – 3.0 mils) or according to ISO-St3
- Suitable coating (zinc silicate primer) must be dry, free from any contamination and zinc salts
- Stainless steel; degreased and sweep blast (SSPC SP-16) cleaned to roughness of 40 – 70 µm (1.5 – 2.8 mils) with non-ferrous abrasive

**Substrate temperature and application conditions**

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

**INSTRUCTIONS FOR USE**

- Power agitate to uniform consistency
- When applying more than one coat, it is recommended that the total dry film thickness does not exceed 80 µm (3.1 mils)

**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.)

**Brush/roller**

- For Roller application the best results will be obtained by using fine foam type rollers

**Cleaning solvent:** THINNER 21-06

**ADDITIONAL DATA**

Overcoating interval for DFT up to 25 µm (1.0 mils)					
Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
itself	Minimum	24 hours	16 hours	12 hours	6 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited

Note: Surface should be dry and free from any contamination

Curing time for DFT up to 25 µm (1.0 mils)		
Substrate temperature	Dry to touch	Dry to handle
10°C (50°F)	1 hour	5 hours
20°C (68°F)	45 minutes	3.5 hours
30°C (86°F)	30 minutes	2 hours
40°C (104°F)	15 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.