

# SIGMATHERM 500

3 pages

February 2013  
Revision of October 2009

**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; a minimum of 200°C is necessary to fuse the aluminium coating
  - a minimum drying time of 3 days at 20°C should be allowed before exposure to heat
  - application by spray improves the appearance

**COLOURS AND GLOSS** aluminium – eggshell

**BASIC DATA AT 20 °C** (1 g/cm<sup>3</sup> = 8.35 lb/US gal; 1 m<sup>2</sup>/l = 40.7 ft<sup>2</sup>/US gal)

Mass density	1.1 g/cm <sup>3</sup>
Volume solids	32% ± 2%
VOC (Directive 1999/13/EC, SED)	max. 561 g/kg (Directive 1999/13/EC, SED)
VOC (UK PG 6/23(92) appendix 3)	max. 600 g/l (approx. 5.0 lb/gal) (UK PG 6/23(92) Appendix 3)
Recommended dry film thickness	25 µm
Theoretical spreading rate	12.8 m <sup>2</sup> /l for 25 µm
Touch dry after	3 hours at 5- 10°C 1 hour at 20 °C
Overcoating interval	min. 48 hours at 5 - 10°C, 24 hours at 20°C max. no limitations
Shelf life (cool and dry place)	at least 12 months, longer storage period may affect the brilliancy

**RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES**

- steel; blast cleaned to ISO-Sa2½ or ISO-Sa3, blasting profile 40 - 70 µm

**SYSTEM SPECIFICATION** for heat resistant systems system sheet: 3140

- INSTRUCTIONS FOR USE**
- stir well before use
  - the temperature of the paint should preferably be above 15°C, otherwise extra thinner may be required to obtain application viscosity
  - too much solvent results in reduced sag resistance
  - adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)

**AIR SPRAY**

Recommended thinner	no thinner should be added
Nozzle orifice	2 - 3 mm
Nozzle pressure	0.3 - 0.4 MPa (= approx. 3 - 4 bar; 44 - 58 p.s.i.)

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## AIRLESS SPRAY

Recommended thinner	no thinner should be added
Nozzle orifice	approx. 0.38 mm (= 0.015 in)
Nozzle pressure	8 - 12 MPa (= approx. 80 - 120 bar; 1160 - 1740 p.s.i.)

## BRUSH/ROLLER

Recommended thinner	no thinner should be added
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## CLEANING SOLVENT

Thinner 20-05

## 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	see information sheet 1410
Explanation to product data sheets	see information sheet 1411
Safety indications	see information sheet 1430
Safety in confined spaces and health safety	
Explosion hazard - toxic hazard	see information sheet 1431
Safe working in confined spaces	see information sheet 1433
Directives for ventilation practice	see information sheet 1434
Cleaning of steel and removal of rust	see information sheet 1490
Relative humidity - substrate temperature - air temperature	see information sheet 1650

## SAFETY PRECAUTIONS

- for paint and recommended thinners see safety 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 vapour as well as contact between the wet paint and exposed skin or eyes

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