

SIGMATHERM 450

2 pages

October 2009
Revision of September 2005

DESCRIPTION	heat resistant silicone based finish
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - heat resistant up to 450°C - to be used for the internal and external protection of steel surfaces - good weather resistance - after a drying time of 3 days at 20°C a minimum temperature of 200°C for 2 hours is necessary to obtain sufficient mechanical strength
COLOURS AND GLOSS	aluminium - eggshell
BASIC DATA AT 20°C	(1 g/cm ³ = 8.25 lb/US gal; 1 m ² /l = 40.7 ft ² /US gal)
Mass density	1.0 g/cm ³
Volume solids	24 ± 2%
VOC (supplied)	max. 612 g/kg (Directive 1999/13/EC, SED) max. 639 g/l (approx. 5.3 lb/gal)
Recommended dry film thickness	30 µm
Theoretical spreading rate	8 m ² /l for 30 µm
Touch dry after	30 min. at 20°C, 45 min. at 10°C
Overcoating interval	min. 16 hours max. unlimited
Shelf life (cool and dry place)	at least 6 months
RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES	<ul style="list-style-type: none"> - zinc silicate primer; (e.g. SigmaZinc 158) dry and free from any zinc salts - previous suitable coat; dry and free from any contamination - thermal aluminium sprayed steel or thermal zinc sprayed steel; dry and free from any contamination - substrate temperature should be at least 3°C above dew point
INSTRUCTIONS FOR USE	<ul style="list-style-type: none"> - power agitate to uniform consistency - by using a mistcoat technique it is possible to apply SigmaTherm 450 on top of a zinc silicate primer
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 - 15 MPa (= approx. 120 - 150 bar; 1700 - 2130 p.s.i.)
AIR SPRAY	
Recommended thinner	no thinner should be added
Nozzle orifice	1.5 - 2 mm
Nozzle pressure	0.3 - 0.4 MPa (= approx. 3 - 4 bar; 43 - 57 p.s.i.)
BRUSH/ROLLER	for touch up and spot repair only
CLEANING SOLVENT	Thinner 21-06

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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

Worldwide availability

Whilst it is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis, 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

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
Cleaning of steel and removal of rust	see information sheet 1490

LIMITATION OF LIABILITY

The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the Sigma Coatings products made by PPG Protective & Marine Coatings, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

PPG Protective & Marine Coatings has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. PPG Protective & Marine Coatings does therefore not accept any liability arising from loss, injury or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The data contained herein are liable to modification as a result of practical experience and continuous product development.

This data sheet replaces and annuls all previous issues and it is therefore the user's responsibility to ensure that this sheet is current prior to using the product.

The English text of this document shall prevail over any translation thereof.

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