

SIGMADUR 540

(SIGMACOVER HS NISO FINISH)



3 pages

September 2005
Revision of March 2004

DESCRIPTION	two component high gloss VOC compliant epoxy acrylic finish
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - non--isocyanate - colour and gloss retention superior to standard epoxy coatings - non-chalking, non-yellowing - long pot life but quick drying
COLOURS AND GLOSS	wide colour range - highgloss
BASIC DATA AT 20°C	(1 g/cm ³ = 8.25 lb/US gal; 1 m ² /l = 40.7 ft ² /US gal) (data for mixed product)
Mass density	1.3 g/cm ³
Volume solids	54 ± 2%
VOC (supplied)	max. 324 g/kg (Directive 1999/13/EC, SED) max. 411 g/l (approx. 3.4 lb/gal)
Recommended dry film thickness	50 - 60 µm
Theoretical spreading rate	10.9 m ² /l for 50 µm *
Touch dry after	2 hours
Full cure after	7 days
	(data for components)
Shelf life (cool and dry place)	at least 12 months
Flash point	base 29°C, hardener 24°C * see additional data
RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES	<ul style="list-style-type: none"> - previous epoxy coats; dry and free from any contamination and sufficiently roughened if necessary - substrate temperature should be above 5°C and at least 3°C above dew point during application and curing
INSTRUCTIONS FOR USE	<p>mixing ratio by volume: base to hardener 90 : 10</p> <ul style="list-style-type: none"> - the temperature of the mixed base and hardener should preferably be above 15°C, otherwise extra solvent may be required to obtain application viscosity - too much solvent results in reduced sag resistance - if required, thinner should be added after mixing the components
Induction time	none
Pot life	6 hours at 20°C
AIRLESS SPRAY	
Recommended thinner	Thinner 91-92
Volume of thinner	0 - 5%, depending on required thickness and application conditions
Nozzle orifice	approx. 0.38 - 0.46 mm (= 0.015 - 0.018 in)
Nozzle pressure	15 MPa (= approx. 150 bar; 2130 p.s.i.)

SIGMADUR 540
(SIGMACOVER HS NISO FINISH)

September 2005

AIR SPRAY

Recommended thinner Thinner 91-92
 Volume of thinner 5 - 10%, depending on required thickness and application conditions
 Nozzle orifice 1 - 1.5 mm
 Nozzle pressure 0.3 - 0.4 MPa (= approx. 3 - 4 bar; 43 - 57 p.s.i.)

BRUSH/ROLLER

Recommended thinner Thinner 91-92
 Volume of thinner 0 - 5%

CLEANING SOLVENT

Thinner 91-92

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

- avoid at all times inhalation of aerosol spraymist

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m ² /l	10.9	9.1
dft in µm	50	60

Overcoating table

substrate temperature	5°C	10°C	20°C	30°C
minimum interval	24 hours	16 hours	8 hours	6 hours
maximum interval	no limitation, provided that the surface is free from any contamination			

Curing table at 50 µm for SigmaDur 540

substrate temperature	dry to handle	full cure
5°C	22 hours	14 days
10°C	16 hours	12 days
20°C	10 hours	7 days
30°C	6 hours	4 days

- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)

SIGMADUR 540

(SIGMACOVER HS NISO FINISH)

September 2005

Pot life (at application viscosity)

10°C	10 hours
20°C	6 hours
30°C	3 hours

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

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.

	PDS	7740
204030	white	7000001400