

**SIGMADUR 540**  
(SIGMACOVER HS NISO FINISH)

Andrews Coatings Ltd  
01902 712286

4 pages

September 2005  
Revision of March 2004

**DESCRIPTION**

two component high gloss VOC compliant epoxy acrylic finish

**PRINCIPAL CHARACTERISTICS**

- isocyanate free
- 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<sup>3</sup> = 8.25 lb/US gal; 1 m<sup>2</sup>/l = 40.7 ft<sup>2</sup>/US gal)  
(data for mixed product)

Mass density 1.3 g/cm<sup>3</sup>  
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<sup>2</sup>/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**

- 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**

mixing ratio by volume: base to hardener 90 : 10

- 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

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## AIRLESS SPRAY

Recommended thinner Sigma 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.)

## AIR SPRAY

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

## CLEANING SOLVENT

Sigma 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 based 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	10.9	9.1
spreading rate m <sup>2</sup> /l		
dft in µm	50	60

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### ***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 sheet 1433 and 1434)

### ***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 Sigma 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

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## 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 products made by Sigma 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.

Sigma 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. Sigma 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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Andrews Coatings Ltd  
Andrews Coatings Ltd  
Carver Building, Littles Lane  
Wolverhampton  
West Midlands WV1 1JY  
Tel: 01902 712286  
Fax: 01902 426574  
sales@sigmacoatingsdirect.co.uk  
www.sigmacoatingsdirect.co.uk