

# SIGMADUR™ 540

## DESCRIPTION

Two-component, high-gloss, VOC-compliant epoxy acrylic finish

## PRINCIPAL CHARACTERISTICS

- Non-isocyanate
- Excellent gloss and color retention
- Non-chalking, non-yellowing
- Long pot life but quick-drying
- Can be recoated even after long exposure periods

## COLOR AND GLOSS LEVEL

- Wide color range
- Gloss

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.3 kg/l (10.8 lb/US gal)
Volume solids	54 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 324.0 g/kg UK PG 6/23(92) Appendix 3: max. 411.0 g/l (approx. 3.4 lb/US gal)
Recommended dry film thickness	50 - 60 µm (2.0 - 2.4 mils) depending on system
Theoretical spreading rate	10.8 m <sup>2</sup> /l for 50 µm (433 ft <sup>2</sup> /US gal for 2.0 mils)
Dry to touch	2 hours
Full cure after	7 days
Shelf life	Base: at least 36 months when stored cool and dry Hardener: at least 12 months when stored cool and dry

### Notes:

- See ADDITIONAL DATA - Spreading rate and film thickness
- See ADDITIONAL DATA - Overcoating intervals
- See ADDITIONAL DATA - Curing time

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Compatible previous coat must be dry and free from any contamination
- Surface of previous coat should be sufficiently roughened if necessary



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## **Substrate temperature**

- Substrate temperature during application and curing should be above 5°C (41°F)
  - Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
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## **INSTRUCTIONS FOR USE**

### **Mixing ratio by volume: base to hardener 89.5:10.5**

- Adding too much thinner results in reduced sag resistance
  - The temperature of the mixed base and hardener should preferably be above 15°C (59°F), otherwise extra thinner may be required to obtain application viscosity
  - If required, thinner should be added after mixing the components
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### **Induction time**

None

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### **Pot life**

6 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

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### **Air spray**

#### **Recommended thinner**

THINNER 91-92

#### **Volume of thinner**

5 - 10%, depending on required thickness and application conditions

#### **Nozzle orifice**

1.0 - 1.5 mm (approx. 0.040 - 0.060 in)

#### **Nozzle pressure**

0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 p.s.i.)

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## 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

15.0 MPa (approx. 150 bar; 2176 p.s.i.)

Note: In order to achieve the optimum finish and cosmetic appearance, the product may be thinned by 10% and applied using an air-assisted airless spray gun set up with a smaller tip size of 0.28 – 0.38 mm (0.011 – 0.015 in)

## Brush/roller

### Recommended thinner

THINNER 91-92

### Volume of thinner

0 - 5%

## Cleaning solvent

THINNER 91-92

## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
50 µm (2.0 mils)	10.8 m <sup>2</sup> /l (433 ft <sup>2</sup> /US gal)
60 µm (2.4 mils)	9.0 m <sup>2</sup> /l (361 ft <sup>2</sup> /US gal)

Overcoating interval for DFT up to 50 µm (2.0 mils)					
Overcoating with...	Interval	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)
itself	Minimum	24 hours	16 hours	8 hours	6 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited

Note: Surface should be dry and free from any contamination

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## Curing time for DFT up to 50 µm (2.0 mils)

Substrate temperature	Dry to handle	Full cure
5°C (41°F)	22 hours	14 days
10°C (50°F)	16 hours	12 days
20°C (68°F)	10 hours	7 days
30°C (86°F)	6 hours	4 days

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

## Pot life (at application viscosity)

Mixed product temperature	Pot life
10°C (50°F)	10 hours
20°C (68°F)	6 hours
30°C (86°F)	3 hours

## 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
- Avoid at all times inhalation of aerosol spray mist

## 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  | INFORMATION SHEET | 1410 |
| • EXPLANATION TO PRODUCT DATA SHEETS   | INFORMATION SHEET | 1411 |
| • SAFETY INDICATIONS   | INFORMATION SHEET | 1430 |
| • SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD | INFORMATION SHEET | 1431 |
| • RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE                  | INFORMATION SHEET | 1650 |



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