

SIGMACOVER 566

4 pages

September 2009
Revision of April 2008

DESCRIPTION

two component high build epoxy acrylic tiecoat containing inert pigment and extenders

PRINCIPAL CHARACTERISTICS

- to be used over sound coil coated sheet
- easy application by brush/roller and (airless) spray
- provides excellent adhesion to major coil coated substrate including sound PVC plastisol, PVDF, polyester, silicon polyester, polyurethane and galbestos
- excellent adhesion is also obtained to weathered PVC plastisol
- high impact and bend resistance
- good resistance to thermal stress
- long pot life but quick drying

COLOURS AND GLOSS

grey - flat

BASIC DATA AT 20°C

(1 g/cm³ = 8.25 lb/US gal; 1 m²/l = 40.7 ft²/US gal)
(data for mixed product)

Mass density	1.3 g/cm ³
Volume solids	43 ± 2%
VOC (supplied)	max. 388 g/kg (Directive 1999/13/EC, SED) max. 494 g/l (approx. 4.1 lb/gal)
Recommended dry film thickness	50 - 70 µm
Theoretical spreading rate	8.6 m ² /l for 50 µm (dependant on profile) *
Touch dry after	1 hour *
Overcoating interval	min. 6 hours * max. unlimited *
Full cure after	3 hours *

(data for components)

Shelf life (cool and dry place)

at least 12 months
* see additional data

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- SigmaCover 566 can be applied directly to sound coil coat or to SigmaCover 280
- new surfaces which are sound but dirty must be water washed and dry prior to application
- substrate temperature should be at least 5°C and at least 3°C above dew point during application and curing
- weathered plastisol must be water washed with detergent and rinsed clean

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INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 86 : 14

- stir well before use
- 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 and slower cure
- thinner should be added after mixing the components

Induction time

none

AIRLESS SPRAY

Recommended thinner

Thinner 91-92

Volume of thinner

0 - 5%, depending on required thickness and application conditions

Nozzle orifice

approx. 0.46 mm (= 0.018 in)

Nozzle pressure

15 MPa (= approx. 150 bar; 2130 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

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m ² /l	8.6	7.2	6.1
dft in µm	50	60	70

Overcoating table for SigmaCover 566 for dft up to 70 µm

with itself, SigmaCover 456 and SigmaDur 520

substrate temperature	5°C	10°C	15°C	20°C	30°C	40°C
minimum interval	36 hours	24 hours	16 hours	10 hours	4 hours	2 hours
maximum interval	unlimited					

- surface should be dry and free from chalking and contamination

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Curing table for dft up to 70 µm

substrate temperature	touch dry	hard dry *
5°C	140 min.	6 hours
10°C	100 min.	4 hours
15°C	80 min.	3 hours
20°C	60 min.	2.5 hours
30°C	45 min.	2 hours
40°C	30 min.	1 hour

* These are hard dry times as assessed by BS3900 C3. Full cure will take longer and will be dependant on the substrate temperature and free air movement.

Pot life (at application viscosity)

15°C	12 hours
20°C	8 hours
25°C	6 hours
30°C	5 hours
35°C	4 hours
40°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

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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 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	7454
220261	grey	5000002200
172822	grey	5000051400
220259	offwhite	7001002200
183176	offwhite	7001001400