

SIGMADUR CLEARCOAT

4 pages

25 November 2009
Revision of February 2009

DESCRIPTION	two component aliphatic clear acrylic polyurethane gloss finish
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - recoatable clear acrylic polyurethane finish - suitable for application over aluminium pigmented polyurethanes - excellent resistance to atmospheric exposure conditions - excellent gloss retention - non-chalking, non-yellowing - tough and abrasion resistant - resistant to splash of mineral and vegetable oils, white spirit, paraffins, aliphatic petroleum products and mild chemicals - reduced sensitivity to early condensation and rain - can be recoated even after long atmospheric exposure - cures at temperatures down to -5°C
COLOURS AND GLOSS	clear - gloss
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	1.0 g/cm ³
Volume solids	50 ± 2%
VOC (supplied)	max. 463 g/kg (Directive 1999/13/EC, SED) max. 450 g/l (approx. 3.8 lb/gal)
Recommended dry film thickness	35 - 50 µm depending on system
Theoretical spreading rate	14.3 m ² /l for 35 µm
Touch dry after	1 hour
Overcoating interval	min. 12 hours * max. unlimited
Full cure after	7 days * (data for components)
Shelf life (cool and dry place)	at least 12 months
RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES	<ul style="list-style-type: none"> - previous coat; (polyurethane) dry and free from any contamination and sufficiently roughened if necessary - during application and curing a substrate temperature down to -5°C is acceptable provided the substrate is dry and free from water or ice - substrate temperature should be at least 3°C above dew point - maximum relative humidity during application and curing is 85%

SIGMADUR CLEARCOAT

25 November 2009

INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 85 : 15

- the temperature of the mixed base and hardener should preferably be above 10°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

Pot life

4 hours at 20°C *
* see additional data

AIR SPRAY

Recommended thinner

Thinner 21-06

Volume of thinner

10 - 12%, 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

Recommended thinner

Thinner 21-06

Volume of thinner

0 - 5%

CLEANING SOLVENT

Thinner 21-06

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

- contains a toxic polyisocyanate curing agent
- avoid at all times inhalation of aerosol spraymist

SIGMADUR CLEARCOAT

25 November 2009

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m ² /l	14.3	10.0
dft in µm	35	50

Overcoating table with itself

substrate temperature	-5°C	0°C	10°C	20°C	30°C	40°C
minimum interval	48 hours	30 hours	16 hours	9 hours	6 hours	4 \ hours
maximum interval	unlimited					

- surface should be dry and free from any contamination

Curing table

substrate temperature	dry to handle	full cure
-5°C	48 hours	20 days
0°C	24 hours	16 days
10°C	12 hours	10 days
20°C	6 hours	7 days
30°C	5 hours	5 days
40°C	3 hours	3 days

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

Pot life (at application viscosity)

10°C	6 hours
20°C	4 hours
30°C	3 hours
40°C	2 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

SIGMADUR CLEARCOAT

25 November 2009

Safety in confined spaces and health safety	
Explosion hazard - toxic hazard	see information sheet 1431
Safe working in confined spaces	see information sheet 1433
Directives for ventilation practice	see information sheet 1434

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	7531
192494	clear	0000001400