SIGMADUR CLEARCOAT

4 pages

25 November 2009
Revision of February 2009

DESCRIPTION

two component aliphatic clear acrylic polyurethane gloss finish

PRINCIPAL CHARACTERISTICS

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

Mass density	1.0 g/cm³
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 m²/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

- 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%

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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

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ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m²/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

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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

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