



New Guard Coatings Group

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This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

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SIGMADUR™ CLEARCOAT

DESCRIPTION

Two-component, aliphatic clear acrylic polyurethane gloss finish

PRINCIPAL CHARACTERISTICS

- Suitable for application over aluminum pigmented polyurethanes
- Excellent gloss retention
- 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 (23°F)
- Suitable for use on stainless, non-ferrous materials not subject to immersion

COLOR AND GLOSS LEVEL

- Clear
- Gloss

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.0 kg/l (8.3 lb/US gal)
Volume solids	50 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 463.0 g/kg UK PG 6/23(92) Appendix 3: max. 450.0 g/l (approx. 3.8 lb/US gal)
Recommended dry film thickness	35 - 50 µm (1.4 - 2.0 mils) depending on system
Theoretical spreading rate	14.3 m ² /l for 35 µm (573 ft ² /US gal for 1.4 mils)
Dry to touch	1 hour
Overcoating Interval	Minimum: 12 hours Maximum: Unlimited
Full cure after	7 days
Shelf life	Base: at least 36 months when stored cool and dry Hardener: at least 24 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

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RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Atmospheric exposure conditions

- Previous coat (polyurethane) must be dry and free from any contamination
- Stainless steel, non-ferrous metal should be sufficiently roughened by light sanding followed by degreasing with solvent or cleaner

Substrate temperature and application conditions

- Substrate temperature during application at -5°C (23°F) is acceptable; provided the substrate is free from ice and dry
- Substrate temperature during application and curing down to -5°C (23°F) is acceptable
- Relative humidity during application and curing should not exceed 85%

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 85:15

- The temperature of the mixed base and hardener should be above 10°C (50°F), otherwise extra thinner may be required to obtain application viscosity
- Adding too much thinner 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 (68°F)

Note: See ADDITIONAL DATA – Pot life

Air spray

Recommended thinner

THINNER 21-06

Volume of thinner

10 - 12%, 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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Brush/roller

Recommended thinner

THINNER 21-06

Volume of thinner

0 – 5%

Cleaning solvent

THINNER 21-06

ADDITIONAL DATA

Spreading rate and film thickness

DFT	Theoretical spreading rate
35 µm (1.4 mils)	14.3 m ² /l (573 ft ² /US gal)
50 µm (2.0 mils)	10.0 m ² /l (401 ft ² /US gal)

Overcoating interval for DFT up to 35 µm (1.4 mils)

Overcoating with...	Interval	-5°C (23°F)	0°C (32°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
itself	Minimum	48 hours	30 hours	16 hours	9 hours	6 hours	4 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Note: Surface should be dry and free from any contamination

Curing time for DFT up to 35 µm (1.4 mils)

Substrate temperature	Dry to handle	Full cure
-5°C (23°F)	48 hours	20 days
0°C (32°F)	24 hours	16 days
10°C (50°F)	12 hours	10 days
20°C (68°F)	6 hours	7 days
30°C (86°F)	5 hours	5 days
40°C (104°F)	3 hours	3 days

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

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Pot life (at application viscosity)	
Mixed product temperature	Pot life
10°C (50°F)	6 hours
20°C (68°F)	4 hours
30°C (86°F)	3 hours
40°C (104°F)	2 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
- Contains a toxic polyisocyanate curing agent
- 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
• SAFE WORKING IN CONFINED SPACES	INFORMATION SHEET	1433
• DIRECTIVES FOR VENTILATION PRACTICE	INFORMATION SHEET	1434
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

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