

Two sheet issue

June 2008

DESCRIPTION	general purpose two component aliphatic polyurethane finish
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - developed as a polyurethane finish for steel and concrete structures in atmospheric exposure conditions - excellent colour and gloss retention - good impact and abrasion resistance - relatively long potlife at elevated temperatures - good corrosion resistance - resistant to splash and spillage of mild chemicals and solvents - good U.V. resistance - very high elasticity - easy to apply
COLOUR AND GLOSS	see Sigmadur colour card - semi gloss
BASIC DATA AT 20 °C	(for mixed product)
Mass density	approx. 1.2g/cm ³ , depending on colours
Solids content	approx. 47% by volume
Recommended dry film thickness	35 µm*
Theoretical spreading rate	13.4 m ² /ltr for 35 µm*
Touch dry after	approx. 1½ hours
Overcoating interval	min. 16 hours* max. no limitations*
Full cure after	10 days
Shelf life (cool, dry place)	at least 12 months
Flashpoint	base 27 °C - hardener 28 °C
* see additional data	
RECOMMENDED SUBSTRATE CONDITIONS	<ul style="list-style-type: none"> - previous suitable coat; epoxy primer or build coat, within overcoating interval and free from any contamination - substrate temperature must be above 5 °C and at least 3 °C above the dew point

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INSTRUCTIONS FOR USE

- mixing ratio: by volume; base to hardener 75 : 25
- the temperature of the mixed base and hardener should be above 15 °C, otherwise extra solvent may be required to obtain the correct application viscosity
- too much solvent will result in lower sag resistance and slower cure
- thinner should only be added after proper mixing of the base and hardener

Induction time at 20 °C none

Pot life at 20 °C 8 hours*

AIRLESS SPRAY

Recommended thinner Sigma thinner 91-88 (flashpoint 26 °C)

Volume of thinner 5 – 10%

Nozzle orifice approx. 0.26 mm (0.015 inch)

Nozzle pressure 150 bar (approx. 2100 p.s.i.)

AIR SPRAY

Recommended thinner Sigma thinner 91-88 (flashpoint 26 °C)

Volume of thinner 10 – 15%

Nozzle orifice 1.5 – 3.0 mm

Nozzle pressure 3 - 4 bar (approx. 43 - 57 p.s.i.)

BRUSH AND ROLLER

Recommended thinner Sigma thinner 21-22 (flashpoint 50 °C)

Volume of thinner 0 - 5%

CLEANING SOLVENT

Sigma thinner 91-88 (flashpoint 26 °C)

SAFETY PRECAUTIONS



see safety sheets 1430, 1431 and MSDS 7690 for information on LEL and TLV values

this is a solvent based 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

Dry film thickness in microns (µm)	35	45
Theoretical spreading rate (m²/l)	13.4	10.4

Minimum dft for closed film with airless spray: 35 µm

Maximum dft for brush application: 40 µm

see sheet two

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Overcoating table for the Sigma Polyurethane range

substrate temperature	20 °C	30 °C	40 °C
minimum interval	16 hours	12 hours	8 hours
maximum interval	no limitation providing the surface is free from any contamination		

Curing table

Substrate temperature	Dry to handle	Full cure
20 °C	90 minutes	10 days
30 °C	60 minutes	7 days
40 °C	45 minutes	5 days

adequate ventilation is required during application and curing

Pot life (at application viscosity)

Paint temperature	Pot life
20 °C	8 hours
30 °C	6 hours
40 °C	4 hours

REFERENCES

explanation to product data sheets on information sheet 1411

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