

SIGMADUR 2500

4 pages

September 2005
Revision of April 2005

DESCRIPTION

two component high solids gloss epoxy polysiloxane finish

PRINCIPAL CHARACTERISTICS

- high gloss epoxy polysiloxane finish
- isocyanate free
- excellent colour and gloss retention
- excellent resistance to atmospheric exposure conditions
- tough and abrasion resistant
- good barrier properties
- facilitates lower application costs by reducing layers
- resistant to splash of mineral and vegetable oils, paraffins, aliphatic petroleum products and mild chemicals

COLOURS AND GLOSS

white (other colours on request) - 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

1.3 g/cm³

Volume solids

90 ± 2%

VOC (supplied)

max. 41 g/kg (Directive 1999/13/EC, SED)

max. 54 g/l (approx. 0.5 lb/gal)

Recommended dry film
thickness

100 - 125 µm depending on system

Theoretical spreading rate

9.0 m²/l for 100 µm *

Touch dry after

10 hours

Overcoating interval

min. 16 hours *

max. 2 years

Full cure after

10 days *

(data for components)

Shelf life (cool and dry place)

at least 12 months

Flash point

base >65°C, hardener 60°C

* see additional data

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- previous coat; inorganic zinc rich primer (e.g. SigmaZinc 158) dry and free from any contamination and sufficiently roughened if necessary
- previous coat; organic zinc rich primer (e.g. SigmaZinc 102 or SigmaZinc 102 HS) dry and free from any contamination and sufficiently roughened if necessary
- substrate temperature should be at least 3°C above dew point
- minimum relative humidity during application and curing is 40%
- maximum relative humidity during application and curing is 85%

SIGMADUR 2500

September 2005

INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 80 : 20

- 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
- thinner should be added after mixing the components

Induction time

none

Pot life

8 hours at 20°C *

* see additional data

AIRLESS SPRAY

Recommended thinner

Sigma thinner 91-92

Volume of thinner

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

Nozzle orifice

approx. 0.38 - 0.42 mm (= 0.015 - 0.016 in)

Nozzle pressure

18 MPa (= approx. 180 bar; 2560 p.s.i.)

BRUSH/ROLLER

Recommended thinner

Sigma thinner 91-92

Volume of thinner

0 - 10%

CLEANING SOLVENT

Sigma thinner 90-53

SAFETY PRECAUTIONS

for paint and recommended thinners see safety sheets 1430, 1431 and relevant material safety data sheets

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

- avoid at all times inhalation of aerosol spraymist

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m ² /l	9	7.2	6
dft in µm	100	125	150

Overcoating table for SigmaDur 2500 with itself

substrate temperature	5°C	10°C	20°C	30°C	40°C
minimum interval	48 hours	24 hours	16 hours	12 hours	8 hours
maximum interval	2 years when cleaned from any contamination				

SIGMADUR 2500

September 2005

Curing table

substrate temperature	touch dry	full cure
5°C	36 hours	28 days
10°C	24 hours	21 days
20°C	10 hours	10 days
30°C	6 hours	5 days
40°C	4 hours	3 days

- adequate ventilation must be maintained during application and curing (please refer to sheet 1433 and 1434)
- please note that should condensation occur during or soon after application this may result in a reduction of gloss and/or adversely affect film formation

Pot life (at application viscosity)

10°C	10 hours
20°C	8 hours
30°C	5 hours
40°C	3 hours

Worldwide availability

Whilst it is always the aim of Sigma 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
Safe working in confined spaces	see information sheet 1433
Directives for ventilation practice	see information sheet 1434
Cleaning of steel and removal of rust	see information sheet 1490

SIGMADUR 2500

September 2005

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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.

DS	7725
238687 white	7000002200
238704 white	7000001400