Chemical Name: Sigmacover Zinc Primer

Manufacturer: Sigma Coatings

Container size: 0.5 gallons

Location: VLA

Disposal: Place empty container in trash.

SIGMACOVER ZINC PRIMER 7402

December 2000

DESCRIPTION	two component polyamide cured zinc epoxy primer
PRINCIPAL CHARACTERISTICS	- designed as a system primer for various paint systems - good corrosion prevention properties - quick drying; can be overcoated after a short interval - can serve as a holding primer for various maintenance systems - the superimposed system must be unsaponifiable - meets COT specification 16.52 (see sheet 1887)
COLOUR AND GLOSS	grey – flat
BASIC DATA AT 20 °C	(for mixed product)
Mass density	approx. 2.2g/cm³
Solids content	approx. 55% by volume
VOC (supplied)	max. 430 g/l
Recommended dry film thickness	25 - 50 µm depending upon blast profile dft's of more than 50 µm are not recommended underneath thick, rigid epoxy systems
Theoretical spreading rate	22.0 m²/ltr for 25 µm*
Touch dry after	approx. 15 mins*
Overcoating interval	min. 6 hours* max. several months*
Curing Time	7 days
Shelf life (cool, dry place)	at least 12 months
Flashpoint	base 29 °C - hardener 26 °C

* see additional data

RECOMMENDED SUBSTRATE CONDITIONS	- steel; blast cleaned to ISO-Sa2½ - blasting profile (Rz) 40 - 70µm - substrate temperature should be at least 5 °C and at least 3 °C above the dew point during application and curing

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INSTRUCTIONS FOR USE

- mixing ratio: by volume; base to hardener 78 : 22
- 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 be added after mixing of the components

Induction time at 20 °C none

Pot life at 20 °C 24 hours

AIRLESS SPRAY

Recommended thinner Sigma thinner 91-92 (flashpoint 20 °C)
Volume of thinner 0 - 20% (depending upon required dft)
Nozzle orifice approx. 0.43 - 0.48 mm (0.017 - 0.019 inch)
Nozzle pressure 150 bar (approx. 43 - 85 p.s.i.)

AIR SPRAY

Recommended thinner Sigma thinner 91-92 (flashpoint 20 °C)
Volume of thinner 0 - 20% (depending upon required dft)
Nozzle orifice 1.8 - 2.2 mm
Nozzle pressure 3 - 6 bar (approx. 43 - 85 p.s.i.)

BRUSH AND ROLLER

Recommended thinner Sigma thinner 91-92 (flashpoint 20 °C)
Volume of thinner 0 - 5%

CLEANING SOLVENT Sigma thinner 90-53 (flashpoint 30 °C)

SAFETY PRECAUTIONS

see safety sheets 1430, 1431 and MSDS 7402 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)	25	35	50	75
Theoretical spreading rate (m^2/l)	22.0	15.7	11.0	7.3

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Overcoating table for a dft of 35 - 50 µm

substrate temperature	10C	20 °C	30 °C	40 °C
minimum interval	8 hours	6 hours	4 hours	3 hours
maximum interval	Several months if free from zinc salts and contamination			

- zinc rich primers can form zinc salts on the surface; they should not be weathered for long periods prior to overcoating
- **internal**; in clean exposure conditions an interval of several months can be allowed
- **external**; in normal exposure conditions a maximum interval of 14 days can be tolerated, but in industrial or marine conditions this interval should be reduced to a practical minimum
- when a long overcoating interval is required, it is recommended to overcoat with 7420 Sigmarite Sealer within two days
- before overcoating, visible surface contamination must be removed by high pressure fresh water cleaning, sweep blasting or mechanical cleaning

Curing table

Substrate temperature	**Touch dry**	**Dry to handle**	**Full cure**
10 °C	40 minutes	4 hours	20 days
15 °C	30 minutes	2 hours	10 days
20 °C	15 minutes	2 hours	7 days
30 °C	10 minutes	1 hour	5 days

- Sigmacover Zinc Primer can be applied at temperatures between 5 °C and 10 °C but the curing rate will be very low
- for such applications alternative zinc rich primers are recommended: Sigma Proferral PR and Sigma Tornusil MC 58 for systems exposed to atmospheric conditions and Sigma Silguard MC for systems exposed to immersed conditions
- adequate ventilation is required during application and curing please refer to sheets 1433 and 1434

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REFERENCES explanation to product data sheets on information sheet 1411

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