SIGMA C200a COAL TAR

3 pages

January 2009
Revision of December2001

DESCRIPTION

two component high build polyamide cured coal tar epoxy coating

PRINCIPAL CHARACTERISTICS

- outstanding water and crude oil resistance
- excellent corrosion resistance
- can be used for buried exposure
- good resistance against chemically polluted water
- can be applied at temperatures down to 10 °C
- good abrasion resistance
- resistant against temperatures up to 120 °C in dry surroundings
- a dft of 400µm can be applied in one operation by airless spray
- meets the requirements of Paint Spec 16, Steel Structures Painting Council; C-200a Corps of Engineers

COLOURS AND GLOSS

black - eggshell

BASIC DATA AT 20°C

(1 g/cm³ = 8.25 lb/US gal; 1 m²/l = 40.7 ft²/US gal)

Mass density	1.3 g/cm³
Volume solids	78± 2%
Recommended dry film thickness	200µm
Theoretical spreading rate	3.4 m²/l for 200 µm*
Touch dry after	4 hours
Overcoating interval	min. 6 hours* max. 5 days*
Full cure after	7 days*
Shelf life (cool and dry place)	at least 12 months

* see additional data

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- steel; blast cleaned to ISO-Sa2½
- previous coat; (Sigma C200a Coaltar or compatible primer) within overcoating interval, dry and free from any contamination, and sufficiently roughened if necessary
- steel, atmospheric conditions; power tool cleaned to SPSS-St3
- substrate temperature should be above 5°C and at least 3°C above dew point

INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 86 : 14

- 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: 15 minutes at 20°C

Pot life: 6 hours at 20°C *

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APPLICATION METHODS

AIRLESS SPRAY

Recommended thinner	Sigma thinner 21-06
Volume of thinner	0 - 15%, depending on required thickness and application conditions
Nozzle orifice approx.	0.48 - 0.58 mm (= 0.019 - 0.023 in)
Nozzle pressure	15-19 MPa (= approx 2130 - 2700 p.s.i.)

AIR SPRAY

Recommended thinner	Sigma thinner 21-06
Volume of thinner	5 - 15%, depending on required thickness and application conditions
Nozzle orifice	1.5 mm-3mm
Nozzle pressure	0.3 - 0.4 MPa (= approx. 3 - 4 bar; 43 - 57 p.s.i.)

BRUSH/ROLLER

Recommended thinner	Sigma thinner 21-06
Volume of thinner	0 - 5%

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

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m²/l	6.1	5.1	3.8	3.1
dft in µm	125	150	200	250

maximum dft without sagging with airless spray: 400 µm
minimum dft for closed film with airless spray: 75 µm
maximum dft for brush application: 75 µm
Note: maximum dft is for overlap areas only

Overcoating table for DFT up to 250µm

substrate temperature	10°C	20°C	30°C	40°C
Minimum interval	24 hours	8 hours	6 hours	4 hours
maximum interval	20 days	7 days	4 days	3 days

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Curing table

Substrate temperature	Curing before exposure to water and slightly polluted atmosphere	Full cure for immersion in polluted water or crude oil
10 °C	At least 24 hours	24 days
20 °C	At least 24 hours	10 days
30 °C	At least 24 hours	5 days
40 °C	At least 24 hours	3 days

– adequate ventilation must be maintained during application and curing (please refer to sheet 1433 and 1434)
– if overcoating material is not compatible tar bleeding can occur

Pot life (at application viscosity, 5Ltr set)

15 °C	8 hours
20 °C	6 hours
30 °C	2 hours
40 °C	1 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.
This product is not part of the Sigma Coatings global range and availability is depending on location.

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