SIGMACOVER 280

A two sheet issue January 2014

DESCRIPTION

Two component polyamide cured corrosion inhibiting epoxy primer

PRINCIPAL CHARACTERISTICS

- general purpose primer used in protective coating systems for immersion and atmospheric exposure conditions
- good adhesion to steel and galvanized steel
- good adhesion to non ferrous metals
- good flow and wetting properties
- good water and corrosion resistance
- cures at temperatures as low as 5 °C
- suitable for touching up of weld seams and damaged epoxy primers during construction
- long recoating intervals are possible when overcoating with epoxy and polyurethane coatings
- can be overcoated with alkyd, chlorinated rubber, vinyl, epoxy and polyurethane coatings
- suitable for application to wet or dry abrasive cleaned substrates
- tolerant to a damp steel surface
- compatible with cathodic protection systems
- can be used in conjunction with Sigma Wet Blast Inhibitor

COLOUR AND GLOSS

red-brown and green – eggshell

BASIC DATA AT 20 °C

( for mixed product )

Mass density

approx. 1.4g/cm³

Solids content

approx. 57% by volume

Recommended dry film thickness

50 - 125 µm

Theoretical spreading rate

11.4 m²/ltir for 50 µm*

depending on the nature and condition of the substrate and the application method employed

Touch dry after

approx. 30 minutes

Overcoating interval

min. 8 hours*  
max. 3 - 6 months*

Full cure after

7 days*

Shelf life (cool,dry place)

12 months

Flashpoint

base and hardener - 26 °C

Available pack size

1 ltr, 5 ltr, 20 ltr

*see additional data

please turn
The information in this data sheet is to the best of our knowledge correct at the date of printing. The company reserves the right to modify data without notice. Any change in data will normally be followed by issue of a new data sheet. The user should check the date of printing and if more than 12 months have elapsed, then the data should only be used after checking with our nearest sales office to establish that they are still valid. Since conditions of application and service may be beyond our control, no liability can be accepted on the basis of this data.

SIGMACOVER 280

January 2014

RECOMMENDED SUBSTRATE CONDITIONS

**for immersion exposure**
- steel; blast cleaned (dry or wet) to ISO Sa2½
- steel with approved zinc silicate shop primer; pretreated according to SPSS-Ss

**for atmospheric exposure**
- steel; pretreated to ISO-Sa2½ or ISO-St3
- shop primed steel; pretreated according to SPSS-Pt3
- galvanized steel; free from grease, salts and other contamination, preferably blast cleaned to (Rz) 30 µm
- substrate temperature should be above 5 °C and at least 3 °C above the dew point during application and curing

INSTRUCTIONS FOR USE

- mixing ratio: by volume; base to hardener 80 : 20
- 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

Potlife at 20 °C 8 hours*

METHOD OF APPLICATION

**AIRLESS SPRAY**
Recommended thinner 91-92 (flashpoint 20 °C)
Volume of thinner 0 - 5% for 75 - 125 µm - 10 - 25% for 50 - 75 µm
Nozzle orifice approx. 0.46 mm (0.018 inch)
Nozzle pressure 150 bar (approx. 2100 p.s.i.)

**AIR SPRAY**
Recommended thinner 91-92 (flashpoint 20 °C)
Volume of thinner 5 - 10%
Nozzle orifice 1.5 - 2.0 mm
Nozzle pressure 3 - 4 bar (approx. 43 - 57 p.s.i.)

**BRUSH AND ROLLER**
Recommended thinner 91-92 (flashpoint 20 °C)
Volume of thinner 0 - 5%

**CLEANING SOLVENT**
90-53 (flashpoint 30 °C)

see sheet two

*Note: *Potlife may vary depending on conditions of application and service.
SAFETY PRECAUTIONS

see safety sheet 1570 for information on LEL and TLV values

ADDITIONAL DATA

Film thickness and spreading rate

<table>
<thead>
<tr>
<th>Dry film thickness in microns (µm)</th>
<th>75</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical spreading rate (m²/l)</td>
<td>7.6</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Maximum dft without sagging with airless spray: 250 µm
Minimum dft for closed film with airless spray: 30 µm
Maximum dft for brush application: 50 µm
Note: maximum dft is for overlap areas only

overcoating table for Sigmacover TCP coating, Sigma TCN 300, epoxy and polyurethane paints used for immersion service

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>5 °C</th>
<th>10 °C</th>
<th>15 °C</th>
<th>20 °C</th>
<th>30 °C</th>
<th>40 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum interval</td>
<td>36 hours</td>
<td>16 hours</td>
<td>10 hours</td>
<td>8 hours</td>
<td>6 hours</td>
<td>4 hours</td>
</tr>
<tr>
<td>Maximum interval when not exposed to daylight</td>
<td>6 months</td>
<td>6 months</td>
<td>6 months</td>
<td>6 months</td>
<td>4 months</td>
<td>3 months</td>
</tr>
<tr>
<td>Maximum interval when exposed to daylight</td>
<td>3 months</td>
<td>3 months</td>
<td>3 months</td>
<td>3 months</td>
<td>2 months</td>
<td>2 months</td>
</tr>
</tbody>
</table>
Overcoating table for Sigmacover CM
Coating, chlorinated rubber, vinyl and alkyd paints used for atmospheric exposure

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>5 °C</th>
<th>10 °C</th>
<th>15 °C</th>
<th>20 °C</th>
<th>30 °C</th>
<th>40 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum interval</td>
<td>16 hours</td>
<td>10 hours</td>
<td>6 hours</td>
<td>5 hours</td>
<td>3 hours</td>
<td>2 hours</td>
</tr>
<tr>
<td>Maximum interval</td>
<td>21 days</td>
<td>21 days</td>
<td>14 days</td>
<td>10 days</td>
<td>7 days</td>
<td>7 days</td>
</tr>
</tbody>
</table>

Figures contained in above are valid for a dft of approx. 50 µm
Substrate should be free from chalking and contamination.

Curing table

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>Touch Dry</th>
<th>Dry to handle</th>
<th>Full cure</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 °C</td>
<td>120 min.</td>
<td>6 hours</td>
<td>18 days</td>
</tr>
<tr>
<td>10 °C</td>
<td>60 min.</td>
<td>4 hours</td>
<td>12 hours</td>
</tr>
<tr>
<td>15 °C</td>
<td>45 min.</td>
<td>3 hours</td>
<td>7 days</td>
</tr>
<tr>
<td>20 °C</td>
<td>30 min.</td>
<td>2 hours</td>
<td>5 days</td>
</tr>
<tr>
<td>30 °C</td>
<td>20 min.</td>
<td>1 hour</td>
<td>4 days</td>
</tr>
</tbody>
</table>

Potlife at application

<table>
<thead>
<tr>
<th>Paint temperature</th>
<th>Pot life</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 °C</td>
<td>12 hours</td>
</tr>
<tr>
<td>20 °C</td>
<td>8 hours</td>
</tr>
<tr>
<td>25 °C</td>
<td>6 hours</td>
</tr>
<tr>
<td>30 °C</td>
<td>5 hours</td>
</tr>
<tr>
<td>35 °C</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

REFERENCES

Explanation to product data sheets on information sheet 1551