TEMASIL 90

DESCRIPTION

A two component, ethyl silicate zinc rich paint.

PRODUCT FEATURES AND RECOMMENDED USES

♦ Offers cathodic protection of steel.
♦ Excellent resistance to abrasion and weathering
♦ Excellent resistance to high, dry temperatures up to + 480 ºC.
♦ Withstands immersion in oils and various solvents. Separate chemical resistance table available.
♦ Can be used as a single coat or as a primer in protective coating systems.
♦ Recommended for bridges, pipework, heat exchangers and chemical tanks etc.

TECHNICAL DATA

Volume solids 55 ± 2 %
Specific gravity 2.0 kg / l (mixed)
Mixing ratio and product codes

<table>
<thead>
<tr>
<th>Base</th>
<th>1 part by volume</th>
<th>008 7381-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardener</td>
<td>1 part by volume</td>
<td>008 7380</td>
</tr>
</tbody>
</table>
Pot life 5 hours (23 ºC)

Recommended film thicknesses and theoretical coverage

<table>
<thead>
<tr>
<th>Recommended film thicknesses</th>
<th>Theoretical coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>dry</td>
<td>wet</td>
</tr>
<tr>
<td>60 µm</td>
<td>120 µm</td>
</tr>
<tr>
<td>80 µm</td>
<td>160 µm</td>
</tr>
</tbody>
</table>

Practical coverage depends on the application method, painting conditions and the shape and roughness of the surface to be coated.

Drying times

<table>
<thead>
<tr>
<th>DFT 75 µm</th>
<th>+ 10 ºC</th>
<th>+ 23 ºC</th>
<th>+ 35 ºC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust dry, after</td>
<td>¼ h</td>
<td>15 min</td>
<td>10 min</td>
</tr>
<tr>
<td>Touch dry, after</td>
<td>1 h</td>
<td>½ h</td>
<td>15 min</td>
</tr>
<tr>
<td>Recoatable, RH 85 % *see overleaf, after</td>
<td>36 h</td>
<td>5 h</td>
<td>2 h</td>
</tr>
<tr>
<td>Recoatable, RH 70 %, after</td>
<td>48 h</td>
<td>24 h</td>
<td>2 h</td>
</tr>
<tr>
<td>Recoatable, RH 50 %, after</td>
<td>-</td>
<td>48 h</td>
<td>24 h</td>
</tr>
</tbody>
</table>

Drying and recoating times are related to the film thickness, temperature, the relative humidity of the air and ventilation.

Finish Matt.
Colours Greenish grey and grey.
TEMASIL 90

APPLICATION DETAILS

Surface preparation  
Oil, grease, salts and dirt are removed by appropriate means. (ISO 12944-4)  
Steel surfaces: Blast clean to grade Sa2½ - 3. (ISO 8501-1)

Finish  
TEMACHLOR 40, TEMACRYL AR, TEMACRYL EA, TEMAL, TEMACOAT GPL-S PRIMER, TEMACOAT GPL-S MIO, TEMACOAT RM 40 and TEMACOAT SPA.

TEMASIL 90 may be overcoated with above mentioned paints when Thinner 1029 does not dissolve the coat.  
Before overcoating it is recommended to spray a misty coat with 25 % thinned TEMACOAT GS 50.

Application conditions
All surfaces must be dry. The temperature of the ambient air or surface should not fall below -15 ºC during application and drying. Relative humidity should be 50 - 90 %. The surface temperature of the steel should remain at least 3 ºC above the dew point.

Mixing components
First stir base and hardener separately. The correct proportions of base and hardener must be mixed thoroughly before use. Use Temaspeed Squirrel Mixer for mixing.

Application
By airless or conventional spray or brush. Agitate during application. Depending on the application method the paint can be thinned 0 - 5 % by volume. Airless spray nozzle tip 0.018" - 0.021" and pressure 120-180bar. Spray angle shall be chosen according to the shape of the object.

When coating interiors of chemical tanks or working in dry conditions, it is recommended to rinse the paint film with fresh water 1 - 24 hours after application. Sharp edges, corners, weld seams and other areas difficult to cover properly by spray application should be coated by a brush before the spray application.

Note! There is a risk of mudcracking or peeling with heavier coats than approx. 100 µm dry film thickness.

Separate application instructions available.

Thinner
Thinner 1029.

Cleaning of equipment
Thinner 1029.

Storage
Avoid to use more than six months old hardener (packing date on a label).

VOC
The Volatile Organic Compounds amount is 470 g/litre of paint. VOC content of the paint mixture thinned 5 % by volume is 480 g/l.

HEALTH AND SAFETY
Containers are provided with safety labels, which should be observed. Further information about hazardous influences and protection are detailed in individual health and safety data sheets. A health and safety data sheet is available on request from Tikkurila Coatings Oy.