TEMALUX 90

DESCRIPTION
A two component, high gloss, high build oxirane ester paint.

PRODUCT FEATURES AND RECOMMENDED USES
♦ Suitable for both industrial finishing and heavy-duty anticorrosion coating for steel surfaces.
♦ Can be used as a single coat and a topcoat.
♦ Environmentally more friendly and for users a more safe alternative than epoxy and polyurethane paints. High volume solids and does not contain any amines or isocyanates.
♦ Can be cured at higher temperatures.
♦ Not suitable for immersion.

TECHNICAL DATA

Volume solids 65 ± 2 %. (ISO 3233)
Weight solids 77 ± 2 %.
Specific gravity 1.3 - 1.5 kg / l (mixed) depending on colour.
Mixing ratio and product codes Base 2 parts by volume 522-series
                                        Hardener 1 part by volume 008 7670
Pot life 4 hours (23 ºC / 74 ºF)

Recommended film thicknesses and theoretical coverage

<table>
<thead>
<tr>
<th>Recommended film thicknesses</th>
<th>Theoretical coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>dry 60 µm</td>
<td>95 µm</td>
</tr>
<tr>
<td></td>
<td>10.8 m²/l</td>
</tr>
<tr>
<td>dry 100 µm</td>
<td>155 µm</td>
</tr>
<tr>
<td></td>
<td>6.5 m²/l</td>
</tr>
<tr>
<td>Recommended film thicknesses</td>
<td>wet</td>
</tr>
<tr>
<td>80 µm</td>
<td>125 µm</td>
</tr>
<tr>
<td>160 µm</td>
<td>250 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 time

<table>
<thead>
<tr>
<th>Drying time</th>
<th>+ 10 ºC</th>
<th>+ 23 ºC</th>
<th>+ 35 ºC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFT 80 µm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dust dry</td>
<td>3 h</td>
<td>1½ h</td>
<td>1 h</td>
</tr>
<tr>
<td>Touch dry</td>
<td>12 h</td>
<td>6 h</td>
<td>3 h</td>
</tr>
<tr>
<td>Recoatable</td>
<td>10 h</td>
<td>4 h</td>
<td>3 h</td>
</tr>
<tr>
<td>“Dry to handle” at increased temperature</td>
<td>90 min/50 ºC</td>
<td>45 min/80 ºC</td>
<td>20 min/100 ºC</td>
</tr>
</tbody>
</table>

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

Finish High gloss.

Colours RAL, NCS, SSG, BS, MONICOLOR NOVA and SYMPHONY colour cards. TEMASPEED tinting.
TEMALUX 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. (ISO 8501-1) If blast cleaning is not possible, phosphating is recommended for cold rolled steel to improve adhesion.

Primed surfaces: Oil, grease, salt and dirt are removed from the surface by appropriate means. Repair any damage to the primer coat. Note the overcoating time of primer. (ISO 12944-4)

Primer

TEMALUX 70, TEMALUX PRIMER, TEMAPRIME EE and FONTECRYL 10.

Finish

TEMALUX 70 and TEMALUX 90.

Application conditions

All surfaces must be dry. The temperature of the ambient air, steel surface and the paint should not fall below +10 ºC / 50 ºF during application or drying. Relative humidity should not exceed 80 %. The surface temperature of the steel should remain at least 3 ºC / 38 ºF 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 a mechanical agitator for mixing or two component spray equipment

Application

By airless or conventional spray, brush. At spray application a “wet-in wet” technique is recommended: first a misty coat or a thin coat, then let the solvents evaporate for 2 - 20 minutes before the final coat is applied.

In order to reach an even, smooth finish at spray application the viscosity of the paint should be correct or the nozzle pressure high enough. Depending on the temperatures of the components (base, hardener, thinner) the paint should be thinned 10 - 20 % at airless spray application, the viscosity should be 40 s DIN4 or less when the nozzle pressure is 120 - 160 bar. If a higher pressure, 160 - 260 bar, is used, thin the paint 0 - 10 %. Airless spray nozzle tip 0.011”, spray angle shall be chosen according to the shape of the object.

At conventional spray application the viscosity should be 20 - 25 s DIN4.

At brush application the paint should be thinned according to the circumstancies. By using air assisted electrostatic painting equipment you can improve the finish quality, especially when using nozzle pressure below 120 bar.

When oven drying is practised, in the temperature range + 50 - 120 ºC, the evaporation time should be for 5 - 30 minutes before ovening, depending on wet film thickness and actual temperature. The advantages with oven drying are faster drying and a more even finish, especially when low nozzle pressures, 60 - 120 bar, are used.

Thinner

Thinner 1048 or 1280. The suitable thinner depends on the painting conditions.

Cleaning of equipment

Thinner 1048 or 1280.

VOC

The Volatile Organic Compounds amount to 320 ± 20 g/litre of paint.

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.

For professional use only.