TEMADUR CLEAR

DESCRIPTION
A two component, glossy polyurethane varnish, hardener aliphatic isocyanate.

PRODUCT FEATURES AND RECOMMENDED USES
♦ Excellent weathering and abrasion resistance.
♦ Used as a topcoat on polyurethane paint systems.
♦ A durable, non-chalking topcoat with good gloss retention and easy to clean surface.
♦ Also suitable for coating of copper, brass, aluminium and zinc surfaces.
♦ The product has MED (Marine Equipment Directive) certificate no 0809-MED-0394 and is thus accepted for painting surfaces inside the ships.
♦ For industrial use only according to Directive 1999/13/EC.

TECHNICAL DATA

Volume solids 43 ± 2 %. (ISO 3233)
Weight solids 48 ± 2 %.
Specific gravity 1.0 kg / l (mixed)
Mixing ratio and product codes
Base 3 parts by volume 005 5600
Hardener 1 part by volume 008 7590
Pot life 2 hours (23 °C) viscosity of 25 s DIN 4
4 hours (23 °C) viscosity of 16 s DIN 4

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>40 µm</td>
<td>95 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>Drying times</th>
<th>+ 5 °C</th>
<th>+ 10 °C</th>
<th>+ 23 °C</th>
<th>+ 35 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFT 40 µm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dust dry, after</td>
<td>40 min</td>
<td>30 min</td>
<td>20 min</td>
<td>10 min</td>
</tr>
<tr>
<td>Touch dry, after</td>
<td>12 h</td>
<td>8 h</td>
<td>4 h</td>
<td>2 h</td>
</tr>
<tr>
<td>Recoatabile without abrading, after</td>
<td>4 h - 10 d</td>
<td>2 h - 6 d</td>
<td>½ h - 72 h</td>
<td>15 min - 36 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
Glossy.

Colours
Clear.
TEMADUR CLEAR

APPLICATION DETAILS

Surface preparation

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

TEMADUR 20, TEMADUR 50, TEMADUR 90, TEMADUR PRIMER, TEMATHANE 50, TEMATHANE 90 and TEMATHANE PC 80.

Finish

TEMADUR CLEAR.

Application conditions

All surfaces must be dry. The temperature of the ambient air, surface or paint should not fall below +5 ºC during application or drying. Relative humidity should not exceed 80 %. 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 conventional or airless spray or by brush. Depending on the temperature of the components (base, hardener, thinner) the varnish should be thinned 15 - 30 % to a viscosity of 14 - 18 s DIN4. Mixing of the components and adjustment of the viscosity should be done right before use in order to reach an optimal result.

In order to obtain an even, non-porous finish, use a "wet in wet" technique: first a misty coat or a thin coat, then let the solvents evaporate for 2 - 15 minutes before applying the final coat.

The product is best suited for application by conventional spray.

Airless spray nozzle tip 0.009" - 0.011" and nozzle pressure 120 - 160 bar. Spray angle shall be chosen according to the shape of the object.

When coating surfaces painted with Temadur the best result is obtained when the varnish is applied on a tacky, 10 - 30 minutes dried, surface.

At brush application the varnish should be thinned according to the circumstances.

TEMADUR CLEAR can also be applied directly on clean dry metal surfaces. Then it is recommended to apply at least two coats.

Thinner

Thinner 1048 or Thinner 1067. At conventional spray also Thinner 1061.

Cleaning of equipment

Thinner 1048, 1067 or 1061.

VOC

The Volatile Organic Compounds amount is 510 g/litre of paint.

VOC content in paint (thinned 30 % by volume) is 600 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.