TEMADUR HB 50

DESCRIPTION
A two component semiglass polyurethane paint, containing anticorrosive pigments, hardener aliphatic isocyanate.

PRODUCT FEATURES AND RECOMMENDED USES
♦ Recommended especially as a single coat finish for agricultural and earth moving machinery and other machinery and equipment.
♦ Suitable also as a topcoat for epoxy/polyurethane systems exposed to weathering and/or chemical attack, e.g. storage tank exteriors, steel framework and other steel structures.
♦ Excellent weathering and abrasion resistance.
♦ A durable, easy to clean and non-chalking topcoat with good gloss and colour retention.
♦ Can also be applied on top of old, undamaged alkyd paint surfaces.

TECHNICAL DATA

Volume solids 57 ± 2 %. (ISO 3233)

Weight solids 69 ± 2 %.

Specific gravity 1.3 ± 0.1 kg / l (mixed)

Mixing ratio and product codes
Base 9 parts by volume 521-series
Hardener 1 part by volume 008 7640

Pot life 4 hours (23 ºC / 74 ºF)

Recommended film thicknesses and theoretical coverage

<table>
<thead>
<tr>
<th>Recommended film thicknesses/one coat application</th>
<th>Theoretical coverage</th>
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</thead>
<tbody>
<tr>
<td>dry 80 µm</td>
<td>wet 140 µm 7.1 m²/l</td>
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<tr>
<td>100 µm</td>
<td>175 µm 5.7 m²/l</td>
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</table>

<table>
<thead>
<tr>
<th>Recommended film thicknesses/as a topcoat</th>
<th>Theoretical coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>dry 40 µm</td>
<td>wet 70 µm 14.2 m²/l</td>
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<tr>
<td>60 µm</td>
<td>105 µm 9.5 m²/l</td>
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Recommended film thicknesses as a topcoat:

<table>
<thead>
<tr>
<th>dry 40 µm</th>
<th>wet 70 µm</th>
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<tbody>
<tr>
<td>50 µm</td>
<td>75 µm</td>
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</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>DFT 60 µm</th>
<th>+ 5 ºC</th>
<th>+ 10 ºC</th>
<th>+ 23 ºC</th>
<th>+ 35 ºC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust dry</td>
<td>45 min</td>
<td>30 min</td>
<td>20 min</td>
<td>10 min</td>
</tr>
<tr>
<td>Touch dry</td>
<td>12 h</td>
<td>8 h</td>
<td>4 h</td>
<td>2½ h</td>
</tr>
<tr>
<td>Recoatable</td>
<td>No limitations.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Finish
Semigloss.

Colours
RAL, NCS, SSG, BS, MONICOLOR NOVA and SYMPHONY colour cards. TEMASPEED tinting.
TIKKURILA COATINGS OY  

PRODUCT DATA SHEET 12.07.2002  
REF. NO TCF 0001  

TEMADUR HB 50

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.

Zinc surfaces: Sweep blast-clean with mineral abrasives, e.g. quartz sand, to an even roughness. (SaS, SFS 5873) If sweep blasting is not possible, the surface should be roughened by hand abrading or washed with PANSSARIPESU detergent.

Hot dip galvanized surfaces are recommended to be painted with a misty coat (paint thinned 25 - 30 % or with separate TEMACOAT SEALER primer before the actual priming).

Aluminium surfaces: Sweep blast-clean with none-metallic abrasives to an even roughness. (SaS, SFS 5873) If sweep blasting is not possible, the surface should be roughened by hand abrading or washed with MAALIPESU detergent.

Note! Painted zinc and aluminium surfaces are not recommended when they are exposed to continuous condensation.

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 PRIMER, TEMADUR 20, TEMADUR HB 50, TEMACOAT GPL-S PRIMER, TEMACOAT GF PRIMER, TEMACOAT HB PRIMER, TEMACOAT HS PRIMER, TEMACOAT PM PRIMER, TEMACOAT GPL-S MIO, TEMACOAT RM 40, TEMACOAT SPA, TEMABOND, TEMAPRIME GF, FONTECRYL 10 and FONTECOAT EP PRIMER.

Finish

TEMPADUR and TEMATHANE.

Application conditions

All surfaces must be dry. The temperature of the ambient air, surface or paint should not fall below +5 ºC / 41 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.

Application

By airless or conventional spray or by brush. In order to obtain an even, non-porous finish, the viscosity should be 40 ± 5 s DIN4 at airless spray and 20 - 30 s DIN4 at conventional spray. To reach thicker coats, more than 80 µm, a "wet-on-wet" coating technique should be practised.

Depending on the temperature of the components the paint can be thinned 5 - 30 %. Airless spray nozzle tip 0.011" - 0.015"; nozzle pressure 120 - 180 bar, spray angle shall be chosen according to the shape of the object.

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Thinner and cleaning of equipment

Thinner 1048, 1067 or 1061.

VOC

The Volatile Organic Compounds amount to 420 ± 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.

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The above information, based on laboratory tests and practical experience, has been proved valid at the date marked on the product data sheet. When necessary verify the validity of the product data sheet. The quality of the product is ensured by our operational system, based on the requirements of the standards ISO 9001 and ISO 14001. As a manufacturer we cannot be responsible for any damages caused by using the product against our instructions of for inappropriate purposes.