Temadur 90

DESCRIPTION

A two-component, high gloss polyurethane paint, hardener aliphatic isocyanate.

PRODUCT FEATURES AND RECOMMENDED USES

• Forms a durable, easy-to-clean and non-chalking topcoat with outstanding gloss and colour retention. The paint has an almost unlimited range of colors, including metallic effects
• Outstanding resistance to weathering and abrasion makes the product a very good solution for original equipment manufacturing, such as agricultural machinery and haulage equipment
• With special hardener Temadur 90 can be used for interior wooden surfaces, e.g. metallic shades kitchen doors
• Recommended to be used as a glossy decorative finishing coat for epoxy systems on a variety of substrates such as steel, aluminium, concrete etc. exposed to severe weathering and/or chemical stress
• Due to CE marking can also be used on top of coating systems used for concrete surfaces. See page 2
• Hardener 008 7594 is recommended to be used in hot and humid conditions
• The product has been tested for non-contamination of grain cargo at the Newcastle Occupational Health & Hygiene, Great Britain
• Recommended for painting of transport and haulage equipment, storage tank exteriors, steel framework and other steel structures, machinery and equipment

TECHNICAL DATA

Volume solids 55±2% (ISO 3233)
Weight solids 68±2%
Specific gravity 1.2±0.1 kg / l (mixed)
Mixing ratio Base 5 parts by volume Temadur 90
Hardener 1 part by volume 008 7590 or 008 7594
Pot life (+23°C) 4 hours

<table>
<thead>
<tr>
<th>Recommended film thicknesses and theoretical coverage</th>
<th>Recommended film thicknesses</th>
<th>Theoretical coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>wet</td>
<td>dry</td>
<td>13.7 m²/l</td>
</tr>
<tr>
<td>75µm</td>
<td>40µm</td>
<td></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>DFT 40µm</th>
<th>+5°C</th>
<th>+10°C</th>
<th>+23°C</th>
<th>+35°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust dry, after</td>
<td>45min</td>
<td>30min</td>
<td>20min</td>
<td>10min</td>
</tr>
<tr>
<td>Touch dry, after</td>
<td>12h</td>
<td>8h</td>
<td>4h</td>
<td>2½h</td>
</tr>
<tr>
<td>Recoatable, after</td>
<td>No limitations.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

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

Gloss

Full gloss.

Color shades

RAL, NCS, SSG, BS, MONICOLOR NOVA and SYMPHONY colour cards. Temaspeed Premium tinting
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APPLICATION INSTRUCTIONS

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)

Concrete surfaces: see the respective data sheets of concrete systems.

Recommended primers
Temacoat GPL-S Primer, Temacoat GF Primer, Temacoat PM Primer, Temacoat GPL-S MIO, Temacoat RM 40, Temacoat SPA Primer, Temacoat SPA 50, Temamastic PM 100, Temabond ST 200, Temabond ST 300, Temadur Primer, Temadur 20, Temaprime GF, Temafloor PU, Temafloor PU-UV, Temafloor P300, Temadur 10.

Concrete surfaces: Temafloor PU, Temafloor PU-UV or Temafloor P300. More information in the respective data sheets.

Recommended topcoats
Temadur 90, Temadur Clear.

Application conditions
All surfaces must be clean, dry and free from contamination. The temperature of the ambient air, surface and paint should not fall below +5°C during application and drying. Relative humidity of the air should not exceed 80% during application and drying. The surface temperature of steel should remain at least 3°C above the dew point. Good ventilation and sufficient air movement is required in confined areas during application and drying.

Concrete surfaces: see the respective data sheets of concrete systems.

Mixing components
First stir base and hardener separately. The correct proportions of base and hardener must be mixed thoroughly before use. Use power mixer for mixing. Insufficient mixing or incorrect mixing ratio will result in uneven drying of the surface and weaken the properties of the coating.

Application
In order to obtain an even, non-porous finish, spray a misty coat: first a thin layer, then let the solvents evaporate for 5–30 minutes and then apply the full coat.

For airless spraying, the product is thinned depending on the temperature of the components (base, hardener, thinner) approximately 10–22% to the viscosity 20–25s (DIN4). Recommended nozzle tip is 0.011"–0.013" and pressure 120–160 bar. Spray angle shall be chosen according to the shape of the object.

For conventional spraying, the product is thinned to the viscosity 20–25s (DIN4). Recommended nozzle tip is 1.2–1.8 mm and pressure 3–4 bar.

For brush application product should be thinned according to the circumstances.

Thinners
Thinner 1048, Thinner 1067, Thinner 1061

Thinner 1061 (fast) is also suitable for conventional spraying.

Cleaning of equipment
Thinner 1048, 1067 or 1061.

VOC
The Volatile Organic Compounds amount is 420 g/litre of paint mixture.

VOC content of the paint mixture (thinned 22% by volume) is 495 g/l.
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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 Oyj.

For industrial and professional use only.

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.

The product is intended for professional use only and shall only be used by professionals who have sufficient knowledge and expertise on the proper use of the product. The information above is advisory only. To the extent permitted by applicable law, we shall not approve of any liability for the conditions under which the product is being used or for the use or application of the product.

In case you intend to use the product for any other purpose than that recommended in this document without first getting our written confirmation on the suitability for the intended use, such use takes place at your own risk.
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EN 1504-2:2004

The European harmonized product standard EN 1504-2:2004 defines the requirements for surface protection systems for concrete.

This product is tested and CE-labelled in accordance with the table 1d in the appendix ZA.

<table>
<thead>
<tr>
<th>CE</th>
<th>0809</th>
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<tbody>
<tr>
<td>Tikkurila Oyj</td>
<td></td>
</tr>
<tr>
<td>Kuninkaalantie 1</td>
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</tr>
<tr>
<td>FI-01300 VANTAA</td>
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</tr>
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<td>16</td>
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<tr>
<td>TIK-0115-5001</td>
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<tr>
<td>EN 1504-2:2004</td>
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</table>

Product for protection and repair of concrete structures – Coating.

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>Permeability to CO₂</td>
<td>$s_D &gt; 50$ m</td>
</tr>
<tr>
<td>Capillary absorption and permeability to water</td>
<td>$w &lt; 0.1$ kg/m²·h$^{0.5}$</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>$&lt; 3000$ mg</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>$E_{fl}$ (NPD)</td>
</tr>
<tr>
<td>Adhesion strength by pull off test</td>
<td>$\geq 2.0$ N/mm²</td>
</tr>
<tr>
<td>Release of dangerous substances</td>
<td>NPD</td>
</tr>
<tr>
<td>Permeability to water vapour</td>
<td>Class I, $s_D &lt; 5$ m</td>
</tr>
</tbody>
</table>