Temaline DW

DESCRIPTION
A two-component, high-build, solvent-free epoxy coating for potable water immersion.

PRODUCT FEATURES AND RECOMMENDED USES
• Approved by WRAS to be used for potable water storage tanks, cisterns and basins. The coating can be used as a one-coat lining in potable water tanks. 100% solvent-free and benzyl alcohol-free, thus confirming the safety of its use
• Has especially good resistance against corrosion. Long-term protection extends the service life and results in cost savings during the life cycle of the painted object
• Available in a white color shade, which makes it easy to inspect the condition of the coated surface. Ease of touch-up painting is relevant in the case of surfaces that are difficult to reach
• Approved by WRAS for potable water up to +23°C/73°F
• Due to CE marking also suitable for concrete surfaces
• Recommended for potable water storage tanks, cisterns and basins

TECHNICAL DATA

Volume solids 100% (ISO 3233)
Weight solids 100%
Specific gravity 1.46 kg/l (mixed)
Mixing ratio Base 4 parts by volume Temaline DW
Hardener 1 part by volume Hardener 008 7090
Pot life (+23°C) ½h

<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></td>
<td>wet</td>
<td>dry</td>
</tr>
<tr>
<td>250µm</td>
<td>250µm</td>
<td>4.0 m²/l</td>
</tr>
<tr>
<td>400µm</td>
<td>400µm</td>
<td>2.5 m²/l</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°C</th>
<th>+23°C</th>
<th>+35°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFT 250µm</td>
<td>6h</td>
<td>4h</td>
<td>1.5h</td>
</tr>
<tr>
<td>Dust dry, after</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch dry, after</td>
<td>20h</td>
<td>12h</td>
<td>6h</td>
</tr>
<tr>
<td>Recoatable, min. after</td>
<td>8h</td>
<td>6h</td>
<td>2h</td>
</tr>
<tr>
<td>Recoatable, max. after</td>
<td>48h</td>
<td>24h</td>
<td>10h</td>
</tr>
<tr>
<td>Fully cured, after</td>
<td>14d</td>
<td>7d</td>
<td>3d</td>
</tr>
</tbody>
</table>

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

Gloss
High gloss.

Color shades
White.
**Temaline DW**

**APPLICATION INSTRUCTIONS**

**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)

Concrete surfaces: The surface must be dry and at least 4 weeks old. The relative humidity of the concrete should not exceed 97%. Remove any splashes and unevennesses by grinding. Remove laitance and form oil from concrete castings by sanding or blast cleaning. Any cracks, crevices and voids must be repaired with a mixture of Temaline DW and fine dry quartz sand.

**Recommended primers**

Temaline DW.

**Recommended topcoats**

Temaline DW.

**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 +10°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.

**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**

Application with a dual feed hot airless spray equipment with a pressure ratio of at least 45:1 and a theoretical litre capacity of at least 8 l/min. Optimum spray temperature is around 50°C at the nozzle, starting temperature about 40°C. Airless spray nozzle tip 0.018”–0.027” and nozzle pressure 180–200 bar. Spray angle shall be chosen according to the shape of the object. Use of a reverse nozzle is recommended. Sharp edges, corners, weld seams and other areas difficult to paint should be painted by brush prior to spray application.

Note! Pot life of the mixture is about 30 min at +23°C and about 5min at +40°C. Avoid to let the mixture cure in hoses, pump or spray gun.

**Thinners**

Do not thin.

**Cleaning of equipment**

Thinner 1031 or acetone.

**VOC**

VOC content of the paint mixture is 4 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 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.
Temaline DW
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 tables 1d, 1f and 1g in the appendix ZA.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Permeability to CO2</td>
<td>$s_D &gt; 50$ m</td>
</tr>
<tr>
<td>Impact resistance</td>
<td>Class I: $\geq 4$ Nm</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>F(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, $5 &lt; s_D &lt; 5$ m</td>
</tr>
<tr>
<td>Resistance to severe chemical attack</td>
<td>Class II</td>
</tr>
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</table>