Temacoat GPL-S Primer

DESCRIPTION
A two-component, polyamide-cured high build epoxy primer containing zinc phosphate.

PRODUCT FEATURES AND RECOMMENDED USES
• Rapidly recoatable Temacoat GPL-S Primer is used as a primer or an intermediate coat in paint systems exposed to abrasion and chemical stress. The paint adheres extremely well to steel, zinc and aluminium surfaces making it a universal, all-round primer for various applications.
• With a special hardener, Temacoat GPL-S Primer cures even at sub-zero temperatures and it can be overcoated after a prolonged period of time.
• The product has MED (Marine Equipment Directive) certificate no EUFI29-19002494-MED and is thus accepted for painting surfaces inside the ships.
• The primer can be tinted to various of colors, which helps achieve the best possible hiding power for the topcoat.
• Can be used as an intermediate coat on zinc-rich epoxy and zinc silicate paints.
• Rapidly recoatable.
• Recommended for bridges, haulage equipment, cranes, steel masts, conveyors and other steelwork, machinery and equipment.

TECHNICAL DATA

Volume solids 55±2% (ISO 3233)

Weight solids 68±2%

Specific gravity 1.3–1.4 kg / l (mixed)

Mixing ratio

<table>
<thead>
<tr>
<th>Base</th>
<th>4 parts by volume</th>
<th>Temacoat GPL-S Primer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardener</td>
<td>1 part by volume</td>
<td>008 5600 or 008 5605 (fast)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Base</th>
<th>5 parts by volume</th>
<th>Temacoat GPL-S Primer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardener</td>
<td>1 part by volume</td>
<td>008 5610</td>
</tr>
</tbody>
</table>

Pot life
4 hours (+23°C) with Hardener 008 5600
2 hours (+23°C) with Hardener 008 5605
4 hours (+23°C) with Hardener 008 5610
6 hours (0°C) with Hardener 008 5610

Recommended film thicknesses and theoretical coverage

<table>
<thead>
<tr>
<th>Recommended film thicknesses</th>
<th>Theoretical coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>wet</td>
<td>dry</td>
</tr>
<tr>
<td>110µm</td>
<td>60µm</td>
</tr>
<tr>
<td>9.0 m²/l</td>
<td></td>
</tr>
<tr>
<td>185µm</td>
<td>100µm</td>
</tr>
<tr>
<td>5.5 m²/l</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.
## Temacoat GPL-S Primer

### Drying time

<table>
<thead>
<tr>
<th>DFT 60 µm</th>
<th>Hardener 008 5600 or 008 5605</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust dry, after</td>
<td>0°C</td>
</tr>
<tr>
<td>with Hardener 008 5600</td>
<td>4h</td>
</tr>
<tr>
<td>with Hardener 008 5605</td>
<td>3h</td>
</tr>
<tr>
<td>Touch dry, after</td>
<td>0°C</td>
</tr>
<tr>
<td>with Hardener 008 5600</td>
<td>16h</td>
</tr>
<tr>
<td>with Hardener 008 5605</td>
<td>12h</td>
</tr>
<tr>
<td>Recoatable with epoxy paints, min. after</td>
<td>0°C</td>
</tr>
<tr>
<td>with Hardener 008 5600</td>
<td>16h</td>
</tr>
<tr>
<td>with Hardener 008 5605</td>
<td>12h</td>
</tr>
<tr>
<td>Recoatable with polyurethane paints, min. after</td>
<td>0°C</td>
</tr>
<tr>
<td>with Hardener 008 5600</td>
<td>24h</td>
</tr>
<tr>
<td>with Hardener 008 5605</td>
<td>16h</td>
</tr>
</tbody>
</table>

Recoatable without roughening max. 6 months

#### Hardener 008 5610

<table>
<thead>
<tr>
<th>DFT 60 µm</th>
<th>-10°C</th>
<th>-5°C</th>
<th>0°C</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>16h</td>
<td>10h</td>
<td>4h</td>
<td>2h</td>
<td>1h</td>
<td>½h</td>
<td>15min</td>
</tr>
<tr>
<td>Touch dry, after</td>
<td>40h</td>
<td>30h</td>
<td>12h</td>
<td>8h</td>
<td>3h</td>
<td>1½h</td>
<td>30min</td>
</tr>
<tr>
<td>Recoatable, min after</td>
<td>48h</td>
<td>36h</td>
<td>14h</td>
<td>10h</td>
<td>4h</td>
<td>2h</td>
<td>1h</td>
</tr>
<tr>
<td>Full cure</td>
<td>28d</td>
<td>21d</td>
<td>18d</td>
<td>6d</td>
<td>4d</td>
<td>4d</td>
<td>3d</td>
</tr>
</tbody>
</table>

Recoatable without roughening max. 2 months

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

**Gloss**

Matt.

**Color shades**

Temaspeed Primers colour card. Temaspeed Premium tinting.

With hardener 008 5610 colours might slightly differ from colour standards when tinted.
**Temacoat GPL-S Primer**

**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) 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. For hot dip galvanized surfaces see separate application instructions or contact Tikkurila Technical Service.

Aluminium surfaces: Sweep blast clean with non-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.

Stainless steel: Roughen the surface by grinding or sweep blasting using non-metallic abrasives.

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)

Note! Hardener 008 5610 is to be used only in steel or primed surfaces.

**Recommended primers**

Temabond ST 200, Temazinc 99, Temacoat GPL-S Primer, Temazinc 77, Temasil 90, Temabond ST 300.

**Recommended topcoats**


**Application conditions**

With hardener 008 5600 or 008 5605:

All surfaces must be clean and dry and free from contamination. During application and drying the temperature of the substrate should be minimum 0°C and relative humidity of the air should not exceed 80%. The surface temperature of the steel should be at least 3°C above the dew point. The product should not be applied at temperatures below 0°C where there is a possibility of ice formation on the substrate. The temperature of paint itself should be above +15°C for proper application. Good ventilation is required in confined areas during application and drying.

With hardener 008 5610:

All surfaces must be clean and dry and free from contamination. The temperature of the substrate should not fall below -10°C during application and drying. The surface temperature of steel should remain at least 3°C above the dew point. Care has to be taken that there is no ice on the substrate. The temperature of paint itself should be above +15°C for proper application. Good ventilation is required in confined areas during application and drying.

Note! There is a natural tendency of this coating to chalk, discolor or yellow unevenly. It is recommended to use polyurethane topcoat when there are high aesthetical requirements on color appearance.

**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.
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**Application**

For airless spraying, the product is thinned approximately 0–15%. Recommended nozzle tip is 0.011”–0.017” and pressure 120–160 bar. Spray angle shall be chosen according to the shape of the object.

Use brush application only for stripe coating. For brush application product should be thinned according to the circumstances.

**Thinners**

Thinner 1031

**Cleaning of equipment**

Thinner 1031.

**VOC**

The Volatile Organic Compounds amount is 425 g/litre of paint mixture. VOC content of the paint mixture (thinned 15% by volume) is 485 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.

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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.