**Temaclad SC 50**

**DESCRIPTION**
A two-component, semi-gloss acrylic polyurethane with anticorrosive pigmentation. Hardener aliphatic isocyanate.

**PRODUCT FEATURES AND RECOMMENDED USES**
- Suitable for urban, marine and industrial environments
- Also suitable to be used as a topcoat in epoxy/epoxypolyurethane systems
- Outstanding colour and sheen retention
- Forms tough and abrasion resistant finish
- Dirt repellent and easy to clean surface.
- Not recommended for use in immersion conditions
- Recommended to be used as a single-coat finish for steel, aluminium and galvanized surfaces

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Volume solids</th>
<th>55±2%. (ISO 3233)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight solids</td>
<td>69±2%.</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.3±0.1 kg / l (mixed).</td>
</tr>
<tr>
<td>Mixing ratio</td>
<td>Base 9 parts by volume Temaclad SC 50 008 7615</td>
</tr>
<tr>
<td>Hardener</td>
<td>1 part by volume</td>
</tr>
<tr>
<td>Pot life (+23°C)</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

**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>90µm*</td>
<td>50µm*</td>
</tr>
<tr>
<td>145µm**</td>
<td>80µm**</td>
</tr>
</tbody>
</table>

*For maintenance painting of solid old paint or coating layer.
**For new painting or for bare metal surfaces. Minimum DFT is 60µm.

Practical coverage depends on the application method, painting conditions and the shape and roughness of the surface to be coated. When using airless spraying in metal-sheeted roofs practical coverage in new painting is usually 5–6 m²/l.

**Drying time**

<table>
<thead>
<tr>
<th>DFT 50µm</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>3h</td>
<td>2h</td>
<td>1h</td>
<td>45min</td>
</tr>
<tr>
<td>Touch dry, after</td>
<td>9h</td>
<td>6h</td>
<td>3h</td>
<td>2h</td>
</tr>
<tr>
<td>Recoatable, min., after</td>
<td>30h</td>
<td>24h</td>
<td>12h</td>
<td>8h</td>
</tr>
</tbody>
</table>

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

**Gloss**
Semi-gloss. (3/RT classification)

**Color shades**
RAL, NCS, SSG, BS, MONICOLOR NOVA and SYMPHONY colour cards. Temaspeed Premium tinting
**Oil, grease, salts and dirt are removed by appropriate means. (ISO 12944-4)**

Steel surfaces: Blast clean to grade Sa2½. (SFSISO 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.

Zinc-coated thin plate surfaces (like metal-sheeted roofs) are washed with PANSSARIPESU detergent.

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.

Primed surfaces: Oil, grease, salt and dirt are removed from the surface by appropriate means. Remove peeling and poorly adhered paint. Repair any damage to the primer coat. Note the overcoating time of primer. (SFS-EN ISO 12944-4)

Old alkyd or acrylic and industrially coated (not PVDF) surfaces: Remove rust and white rust by power tool cleaning to St2. Hard, glossy paint surfaces should be roughened by abrading. Oil, grease, salt, dirt and dust are removed by washing with PANSSARIPESU detergent.

**Recommended primers**
- Temaprin EE, Temacoat GF Primer.

Suitable to be used without primer. Metal-sheeted roofs do not need any priming.

**Recommended topcoats**
- Temaclad SC 50.

**Application conditions**
All surfaces must be clean, dry and free from contamination. During application and drying the temperature of the surface should not fall below 0°C. The surface temperature of steel should remain at least 3°C above the dew point. For proper application the temperature of the product itself should be above +15°C during mixing and application. If the temperature of the substrate is over +50°C, painting is not recommended. Good ventilation is required in confined areas to ensure proper drying. Condensation occurring during or immediately after application may result in matt finish and an inferior film.

**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**
By airless or conventional spray (large surfaces) or by brush (small surfaces). Depending on the application method and the temperature of the components (base, hardener, thinner) the paint can be thinned 0–10 %. Airless spray nozzle tip 0.011”–0.015”, pressure 120–160 bar, spray angle shall be chosen according to the shape of the object. At brush application the paint should be thinned according to the circumstances.

**Thinners**
Thinner 1048, Thinner 1067

**Cleaning of equipment**
Thinner 006 1048 or 006 1067.

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

VOC content of the paint mixture (thinned 10% by volume) is 460g/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.