



# Temasil 90

## DESCRIPTION

A two-component, ethyl silicate zinc rich paint.

## PRODUCT FEATURES AND RECOMMENDED USES

- Protective coating with an effect similar to that achieved with galvanizing. It offers cathodic protection for steel. Temasil 90 is used in environments where extended durability is required
- Withstands dry heat up to +400°C, and as part of systems up to +480°C
- Can be used on steel surfaces exposed to oil and organic solvents. Its usage areas are e.g. interiors of fuel tanks
- Zinc content is complying with ISO 12944 requirements. Offers cathodic protection of steel
- Excellent resistance to abrasion and weathering
- Can be used as a single coat or as a primer in protective coating systems
- Recommended for bridges, pipework, heat exchangers and chemical tanks etc

## TECHNICAL DATA

### Volume solids

55±2%

### Specific gravity

2.0 kg / l (mixed)

### Mixing ratio

Base 1 part by volume Temasil 90  
Hardener 1 part by volume 008 7380

### Pot life (+23°C)

5 hours

### Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
120µm	60µm	9.2 m <sup>2</sup> /l
160µm	80µm	6.9 m <sup>2</sup> /l

Practical coverage depends on the application method, painting conditions and the shape and roughness of the surface to be coated.

Note! The painting work should be performed and supervised according to 12944-7 if not otherwise stated in the respective technical data sheet. Excessive film thickness may result e.g. in cracking, sagging, prolonged drying time, soft film, less chemical resistance, gloss deviation, adhesion and intercoat functionality. In case the product is used otherwise than stated in the standard a written approval from Tikkurila is required.

### Drying time

DFT 75µm	+10°C	+23°C	+35°C
Dust dry, after	½h	15min	10min
Touch dry, after	1h	½h	15min
Recoatable, RH 85%	36h	5h	2h
Recoatable, RH 70%	48h	24h	7h
Recoatable, RH 50%	-	48h	24h

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

### Gloss

Matt.

### Color shades

Greenish grey

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## APPLICATION INSTRUCTIONS

<b>Surface preparation</b>	<p>Oil, grease, salts and dirt are removed by appropriate means. (ISO 12944-4)</p> <p>Steel surfaces: Blast clean to grade Sa2½-3. (ISO 8501-1) The surface profile must be minimum medium (G). (ISO 8503-2)</p>
<b>Recommended topcoats</b>	<p>Temachlor 40, Temacryl AR 50, Temacryl EA 50, Temacoat GPL-S Primer, Temacoat GPL-S MIO, Temacoat RM 40, Temal 400, Temal 600 HB, Temacoat SPA 50, Temacoat 50.</p> <p>Temasil 90 may be overcoated with above mentioned paints when Thinner 1029 does not dissolve the coat. Before overcoating it is recommended to spray a misty coat with 25% thinned Temacoat GS 50.</p>
<b>Application conditions</b>	<p>All surfaces must be clean, dry and free from contamination. The temperature of the ambient air and surface should not fall below -15°C during application and drying. Relative humidity of the air should be between 50–90%. 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.</p>
<b>Mixing components</b>	<p>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.</p>
<b>Application</b>	<p>For airless spraying, the product is thinned approximately 0–5%. Recommended nozzle tip is 0.018"–0.021" and pressure 120–180 bar. Spray angle shall be chosen according to the shape of the object.</p> <p>For brush application product should be thinned according to the circumstances.</p> <p>Agitate during application. Separate application instructions available.</p> <p>When coating interiors of chemical tanks or working in dry conditions, it is recommended to rinse the paint film with fresh water 1–24 hours after application. Sharp edges, corners, weld seams and other areas difficult to cover properly by spray application should be coated by a brush before the spray application.</p> <p>Note! There is a risk of mudcracking or peeling with heavier coats than approx. 100µm dry film thickness.</p>
<b>Thinners</b>	Thinner 1029
<b>Cleaning of equipment</b>	Thinner 1029.
<b>Storage</b>	Avoid to use more than six months old hardener, best before day on the label.
<b>VOC</b>	<p>The Volatile Organic Compounds amount is 470 g/litre of paint. VOC content of the paint mixture (thinned 5% by volume) is 480 g/l. VOC 2004/42/EC (cat A/j) 500 g/l (2010)</p>
<b>HEALTH AND SAFETY</b>	<p>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.</p> <p><b>For industrial use only.</b></p>



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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.