



# Temacoat GS 50

## DESCRIPTION

A two-component, polyamide-cured high build epoxy finishing and intermediate coat.

## PRODUCT FEATURES AND RECOMMENDED USES

- Used as a topcoat or an intermediate coat in epoxy and polyurethane systems. The paint can also be used as a sealer or a single-coat paint and be applied directly on zinc and aluminium surfaces.
- Protects steel framework, conveyors, tubular bridges and other steel structures. Thousands of colors available.
- Used for surfaces exposed to abrasion and mechanical and/or chemical stress.
- Rapidly recoatable and ready to handle.
- Recommended for haulage equipment, steel frameworks, conveyors, tubular bridges and other steel structures.

## TECHNICAL DATA

**Volume solids** 57±2% (mixture, ISO 3233)

**Weight solids** 71±2% (mixture)

**Specific gravity** 1.3 - 1.4 kg / l (mixture)

**Mixing ratio**  
Base 4 parts by volume Temacoat GS 50  
Hardener 1 part by volume 008 5600 or 008 5605 (fast)

**Pot life (+23°C)**  
6 hours with Hardener 008 5600  
3 hours with Hardener 008 5605

## Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
105µm	60µm	9.5 m <sup>2</sup> /l
175µm	100µm	5.7 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.

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## Drying time

DFT 70 µm		0°C	+5°C	+10°C	+23°C	+35°C
Dust dry, after	with Hardener 008 5600	4h	3h	1h	½h	15min
	with Hardener 008 5605	3h	2h	¾h	½h	12min
Touch dry, after	with Hardener 008 5600	22h	14h	10h	4½h	2½h
	with Hardener 008 5605	12h	8h	6h	3½h	2h
Recoatable with epoxy paints, min. after	with Hardener 008 5600	30h	24h	6h	2h	1h
	with Hardener 008 5605	18h	14h	4h	1½h	¾h
Recoatable with polyurethane paints, min. after	with Hardener 008 5600	2d	36h	20h	8h	4h
	with Hardener 008 5605	1½d	24h	12h	6h	3h

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

## Gloss

Semi-gloss.

## Color shades

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

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## APPLICATION INSTRUCTIONS

<b>Surface preparation</b>	<p>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)</p> <p>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.</p> <p>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.</p>
<b>Recommended primers</b>	Temacoat GPL-S Primer, Temacoat GPL-S MIO, Temabond ST 200, Temabond ST 300.
<b>Recommended topcoats</b>	Temacoat HB 30, Temacoat GPL, Temacoat GS 50, Temadur 10, Temadur 20, Temadur 50, Temadur 90, Temadur HB 50, Temadur HB 80, Temadur HS 90, Temadur SC-F 20, Temadur SC-F 50, Temadur SC-F 80, Temathane 50, Temathane 90, Temathane PC 50, Temathane PC 80.
<b>Application conditions</b>	<p>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. Relative humidity of the air should not exceed 80% during application and drying. The product should not be applied at temperatures below 0°C when there is a possibility of ice formation on the substrate. For proper application the temperature of the product itself should be above +15°C during mixing and application. Good ventilation and sufficient air movement is required in confined areas during application and drying.</p> <p>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.</p>
<b>Mixing components</b>	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.
<b>Application</b>	<p>For airless spraying, the product is thinned approximately 5–25%. 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.</p> <p>For brush application product should be thinned according to the circumstances.</p>
<b>Thinners</b>	Thinner 1031
<b>Cleaning of equipment</b>	Thinner 1031
<b>VOC</b>	The Volatile Organic Compounds amount is 370 g/litre of paint mixture. VOC content of the paint mixture (thinned 25 % by volume) is 498 g/l. VOC 2004/42/EC (cat A/j) 500 g/l (2010)



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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.