



Temacoat 50

DESCRIPTION

A two-component resin modified epoxy paint containing anti-corrosive pigments.

PRODUCT FEATURES AND RECOMMENDED USES

- Adheres well to steel, zinc and aluminium surfaces. The product has high film-building properties and can also be used as a single-coat paint.
- Forms a durable and flexible surface with good resistance to mechanical, chemical and climatic stress.
- Helps reduce VOC emissions.
- Used as a primer, intermediate or finish coat on surfaces exposed to climatic, mechanical and chemical stress – also for underground and underwater structures.
- Recommended for building frameworks, tubular bridges, conveyors and other steelwork and equipment.

TECHNICAL DATA

Volume solids 73±2% (mixture, ISO 3233)

Weight solids 86±2% (mixture)

Specific gravity 1.4–1.5 kg / l (mixture)

Mixing ratio

Base	4 parts by volume	Temacoat 50
Hardener	1 part by volume	008 5611

Base	5 parts by volume	Temacoat 50
Hardener	1 part by volume	008 5613

Base	5 parts by volume	Temacoat 50
Hardener	1 part by volume	008 5619

Pot life (+23°C)

6 hours with Hardener 008 5611
4 hours with Hardener 008 5613
4 hours with Hardener 008 5619

Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
115µm	80µm	9.1 m²/l
220µm	150µm	4.9 m²/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 100µm	Hardener	-5°C	0°C	+10°C	+23°C	+35°C
Dust dry, after	008 5611	-	20h	5h	3h	1½h
	008 5613	8h	4h	3h	1h	½h
	008 5619	-	6h	4h	1h	½h
Touch dry, after	008 5611	-	30h	12h	5h	3h
	008 5613	24h	16h	7h	3h	1½h
	008 5619	-	24h	10h	3h	2h
Recoatable, min. after	008 5611	-	32h	14h	5h	2h
	008 5613	16h	8h	5h	3h	1h
	008 5619	-	12h	7h	3h	1h
Recoatable, surfaces to be submerged, min. after	008 5611	-	6d	36h	16h	8h
	008 5613	36h	24h	18h	6h	4h
	008 5619	-	36h	24h	6h	4h
Recoatable with polyurethane paints, min. after	008 5611	-	2½d	18h	6h	3h
	008 5613	24h	16h	8h	4h	1h
	008 5619	-	24h	12h	4h	2h
Recoatable without roughening max. 6 months with hardener 008 5611, max. 3 weeks with Hardener 008 5613 and 008 5619.						

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. Hardener 008 5613 gives slightly yellowish colour for light shades.

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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.

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)

Recommended primers

Temacoat Primer, Temazinc 77, Temazinc 99.

Recommended topcoats

Temacoat GPL, Temacoat GS 50, Temacoat HB 30, Temacoat GPL-S MIO, 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, Temacoat 50.

Application conditions

With hardener 008 5611: All surfaces must be clean and dry and free from contamination. During application and drying the temperature of the surface should not fall below 0°C. Relative humidity of the air should not exceed 80% during application and drying. The surface temperature of the steel should remain 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. For proper application the temperature of the paint 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.

With hardener 008 5613: All surfaces must be clean and dry and free from contamination. During application and drying the temperature of the surface should not fall below -5°C. 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. For proper application the temperature of the paint 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.

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 0–10%. Recommended nozzle tip is 0.015"–0.021" and pressure 120–180 bar. Spray angle shall be chosen according to the shape of the object.

For brush application the product should be thinned according to the circumstances.

Thinners

Thinner 1031

Cleaning of equipment

Thinner 1031

VOC

The Volatile Organic Compounds amount is 260 g/litre of paint mixture.
VOC content of the paint mixture (thinned 5% by volume) is 289 g/l.
VOC 2004/42/EC (cat A/j) 500 g/l (2010)

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.