

# Temacoat GPL-S MIO

## DESCRIPTION

A two-component, polyamide cured epoxy paint pigmented with micaceous iron oxide.

## PRODUCT FEATURES AND RECOMMENDED USES

- Due to its micaceous iron-oxide pigmentation and superior adhesion to steel surfaces, the paint forms a very strong and durable film. It can be used as a primer or an intermediate coat in aggressive environments. With a special hardener, the paint cures even at sub-zero temperatures.
- Can be overcoated after a prolonged period of time. Its property of not needing roughening saves time and reduces costs of the paint system application.
- An impressive track record in bridge construction and pulp, paper and power-industry projects. The paint is widely used in NORSOK and SSG approved systems.
- Environmental product declaration (EPD) in accordance with EN 15804+A2 & ISO 14025 / ISO 21930.
- Used as a primer or intermediate coat in epoxy and polyurethane systems exposed to severe weathering and splashes.
- Rapidly recoatable.
- Recommended for bridges, exteriors of tanks, steel frameworks, conveyors, tubular bridges and other steel structures and equipment.



## TECHNICAL DATA

<b>Volume solids</b>	60±2% (mixture, ISO 3233)	
<b>Weight solids</b>	78±2% (mixture)	
<b>Specific gravity</b>	1.5 kg / l (mixture)	
<b>Mixing ratio</b>	Base 4 parts by volume	Temacoat GPL-S MIO
	Hardener 1 part by volume	008 5600 or 008 5605 (fast)
<b>Pot life</b>	4 hours (23 °C) with Hardener 008 5600 2 hours (23 °C) with Hardener 008 5605	

## Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
100µm	60µm	10.0 m <sup>2</sup> /l
210µm	125µm	4.8 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

Hardener 008 5600 or 008 5605						
DFT 80 µm		0°C	+5°C	+10°C	+23°C	+35°C
Dust dry, after	with Hardener 008 5600	4h	2h	1h	½h	15min
	with Hardener 008 5605	3h	1½h	45min	½h	12min
Touch dry, after	with Hardener 008 5600	18h	10h	6h	2½h	1½h
	with Hardener 008 5605	12h	6h	4h	2h	1h
Recoatible with epoxy paints, min. after	with Hardener 008 5600	24h	12h	6h	2h	1h
	with Hardener 008 5605	18h	16h	4h	1½h	¾h
Recoatible with polyurethane paints, min. after	with Hardener 008 5600	36h	24h	18h	4h	2h
	with Hardener 008 5605	24h	12h	8h	3h	1½h
Recoatible without roughening max. 6 months						

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

### Gloss

Matt.

### Color shades

Grey and red



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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. (ISO 8501-1) If blast cleaning is not possible, phosphating is recommended for cold rolled steel to improve adhesion.</p> <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>
<b>Recommended primers</b>	Temazinc 77, Temazinc 99, Temasil 90, Temacoat GPL-S Primer, Temabond ST 200, Temabond ST 300.
<b>Recommended topcoats</b>	Temacoat GPL, Temacoat GS 50, Temacoat RM 40, Temadur 20, Temadur 50, Temadur 90, Temadur HB 50, Temadur HB 80, Temathane 50, Temathane 90, Temathane PC 50, Temathane PC 80.
<b>Application conditions</b>	<p>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.</p> <p>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.</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 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.</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>	<p>The Volatile Organic Compounds amount is 340 g/litre of paint mixture.</p> <p>VOC content of paint mixture (thinned 10% by volume) is 400 g/l.</p> <p>VOC 2004/42/EC (cat A/j ) 500 g/l (2010)</p>



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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.

