Temacoat GPL-S Primer

DESCRIPTION

A two-component, polyamide-cured high build epoxy primer containing zinc phosphate.

PRODUCT FEATURES AND RECOMMENDED USES

- Rapidly recoatable Temacoat GPL-S Primer is used as a primer or an intermediate coat in paint systems exposed to abrasion and chemical stress. The paint adheres extremely well to steel, zinc and aluminium surfaces making it a universal, all-round primer for various applications
- With a special hardener, Temacoat GPL-S Primer cures even at sub-zero temperatures and it can be overcoated after a prolonged period of time.
- The product has MED (Marine Equipment Directive) certificate no EUFI29-19002494-MED and is thus accepted for painting surfaces inside the ships.
- The primer can be tinted to various of colors, which helps achieve the best possible hiding power for the topcoat
- Can be used as an intermediate coat on zinc-rich epoxy and zinc silicate paints
- Rapidly recoatable
- Resistant to grey/waste water when applied 2x125µm
- Recommended for bridges, haulage equipment, cranes, steel masts, conveyors and other steelwork, machinery and equipment

TECHNICAL DATA

Volume solids

55±2% (ISO 3233)

Weight solids

68±2%

Specific gravity

1.3–1.4 kg / l (mixed)

Mixing ratio

Base	4 parts by volume	Temacoat GPL-S Primer
Hardener	1 part by volume	008 5600, 008 5602* or 008 5605 (fast)

*sold only in China

Base	5 parts by volume	Temacoat GPL-S Primer
Hardener	1 part by volume	008 5610

Pot life

4 hours (+23ºC) with Hardener 008 5600 or 008 5602
2 hours (+23ºC) with Hardener 008 5605

4 hours (+23ºC) with Hardener 008 5610
6 hours (0ºC) with Hardener 008 5610

Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
110µm	60µm	9.0 m²/l
185µm	100µm	5.5 m²/l

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

Temacoat GPL-S Primer

Drying time

Hardener 008 5600, 008 5602 or 008 5605						
DFT 60 µm		0°C	+5°C	+10°C	+23°C	+35°C
Dust dry, after	with Hardener 008 5600 or 008 5602	4h	2h	1h	½h	15min
	with Hardener 008 5605	3h	1½h	45min	½h	12min
Touch dry, after	with Hardener 008 5600 or 008 5602	16h	8h	4h	2½h	1h
	with Hardener 008 5605	12h	6h	3h	1½h	½h
Recoatable with epoxy paints, min. after	with Hardener 008 5600 or 008 5602	16h	6h	4h	2h	45min
	with Hardener 008 5605	12h	5h	3h	1½h	½h
Recoatable with polyurethane paints, min. after	with Hardener 008 5600 or 008 5602	24h	8h	5h	2h	1h
	with Hardener 008 5605	16h	6h	4h	1½h	45min
Recoatable without roughening max. 6 months						

Hardener 008 5610						
DFT 60 µm	-10°C	-5°C	0°C	+5°C	+10°C	+23°C	+35°C
Dust dry, after	16h	10h	4h	2h	1h	½h	15min
Touch dry, after	40h	30h	12h	8h	3h	1½h	30min
Recoatable, min after	48h	36h	14h	10h	4h	2h	1h
Full cure	28d	21d	18d	6d	4d	4d	3d
Recoatable without roughening max. 2 months							

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

Gloss

Matt.

Color shades

Temaspeed Primers colour card. Temaspeed Premium tinting.
With hardener 008 5610 colours might slightly differ from colour standards when tinted.

Temacoat GPL-S Primer

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.

Stainless steel: Roughen the surface by grinding or sweep blasting using non-metallic abrasives.

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)

Note! Hardener 008 5610 is to be used only in steel or primed surfaces.

Recommended primers

Temabond ST 200, Temazinc 99, Temacoat GPL-S Primer, Temazinc 77, Temasil 90, Temabond ST 300.

Recommended topcoats

Fontecoat EP 50, Fontecoat EP 80, Temadur HB 80, Temacoat GPL, Temacoat GS 50, Temacoat RM 40, Temacoat SPA 50, Temadur 10, Temadur 20, Temadur 50, Temadur 90, Temadur HB 50, Temadur HS 90, Temadur SC 20, Temadur SC 50, Temadur SC 80, Temadur SC-F 20, Temadur SC-F 50, Temadur SC-F 80, Temathane 50, Temathane 90, Temathane PC 50, Temathane PC 80.

Application conditions

With hardener 008 5600, 008 5602 or 008 5605:
All surfaces must be clean and dry and free from contamination. During application and drying the temperature of the substrate should be minimum 0°C and relative humidity of the air should not exceed 80%. The surface temperature of the steel should be 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. The temperature of paint itself should be above +15°C for proper application. Good ventilation is required in confined areas during application and drying.

With hardener 008 5610:
All surfaces must be clean and dry and free from contamination. The temperature of the substrate should not fall below -10°C during applicationand drying. 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.
The temperature of paint itself should be above +15°C for proper application.
Good ventilation 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.

Temacoat GPL-S Primer

Application

For airless spraying, the product is thinned approximately 0–15%. 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.

Use brush application only for stripe coating. For brush application product should be thinned according to the circumstances.

Thinners

Thinner 1031

Cleaning of equipment

Thinner 1031.

VOC

The Volatile Organic Compounds amount is 425 g/litre of paint mixture.
VOC content of the paint mixture (thinned 15% by volume) is 485 g/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.

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