

Temacoat GPL-S Primer - Epoxy primer

DESCRIPTION

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

PRODUCT FEATURES

Used as a primer or an intermediate coat in epoxy and polyurethane systems exposed to abrasion and/or chemical stress. Can be used as an intermediate coat on zinc-rich epoxy and zinc silicate paints.

Recommended uses

Recommended for bridges, haulage equipment, cranes, steel masts, conveyors and other steelwork, machinery and equipment.

TECHNICAL DATA

Features

Excellent adhesion to steel, zinc and aluminium surfaces. Rapidly recoatable.
The product has MED (Marine Equipment Directive) certificate no VTT-C-11166-15-14 and is thus accepted for painting surfaces inside the ships.
Hardener 008 5610 enables curing even at temperatures down to -10°C.

Colour Cards

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

Gloss groups

Matt

Coverage

Recommended film thicknesses		Theoretical coverage
dry	wet	
60 µm	110 µm	9.0 m ² /l
100 µm	185 µm	5.5 m ² /l

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

Thinner

1031

Mixing ratio

Base 4 parts by volume 179 serie
Hardener 1 part by volume 008 5600 or 008 5605 (fast)

Base 5 parts by volume 179 serie
Hardener 1 part by volume 008 5610

Application method

By airless spray or by brush.

Pot-life (+23°C)

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

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

Drying times

Hardener 008 5600 or 008 5605					
DFT 60 µm	0°C	+5°C	+10°C	+23°C	+35°C

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Dust dry, after	with Hardener 008 5600	4h	2h	1h	½h	15 min
	with Hardener 008 5605	3h	1½h	45min	½h	12 min
Touch dry, after	with Hardener 008 5600	22h	11h	5h	2½h	2h
	with Hardener 008 5605	12h	6h	3h	2h	1½h
Recoatable with epoxy paints, min. after	with Hardener 008 5600	30h	20h	6h	2h	1h
	with Hardener 008 5605	18h	12h	4h	1½h	45min
Recoatable with polyurethane paints, min. after	with Hardener 008 5600	2 d	32h	18h	6h	3h
	with Hardener 008 5605	1½d	18h	12h	4h	2h
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	15 min
Touch dry, after	40h	30h	12h	8h	3h	1½h	30 min
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.

Solids volume

55 ± 2 % volume % (ISO 3233)
68 ± 2 % weight %.



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Density	1.3 - 1.4 kg / l (mixed)
Product code	179-series
MED Certificate	<u>VTT C 11166 15 14 Temacoat GPL-S Primer</u>

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APPLICATION DETAILS

Application conditions

With hardener 008 5600 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 application and 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.

Preparation

Note! There is a natural tendency of epoxy coatings to chalk and discolor on exterior exposure. 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.

See Pretreatment of hot dip galvanized surfaces.

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.

Priming

Temacoat GPL-S Primer, Temabond, Temazinc 77, Temazinc 99 and Temasil 90.

Finishing

Temacoat GPL, Temacoat GS 50, Temacoat RM 40, Temacoat SPA 50, Temadur, Temathane, Fontecoat EP 50 and Fontecoat EP 80.

Painting

By airless spray or by brush. At airless spray application the paint should be thinned 0–15% by volume. Airless spray nozzle tip 0.011"–0.017" and nozzle pressure 120–160 bar. Spray angle shall be chosen according to the shape of the object.

Use brush application only for stripe coating. At brush application the paint should be thinned according to the circumstances.

Mixing of 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.

Cleaning of tools

Thinner 1031.

EU VOC 2004/42/EC-limit value

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 LABELLING according to Regulation (EC) No. 1272/2008

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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.

Safety data sheet

[Temacoat GPL-S Primer](#)

Thinner safety data sheet

[Temacoat GPL-S Primer](#)

Hardener safety data sheet

[Temacoat GPL-S Primer](#)

The above information, based on laboratory tests and practical experience, has been proved valid at the date marked on the product data sheet. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As a manufacturer we cannot be responsible for any damages caused by using the product against our instructions or for inappropriate purposes.

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