

Hempel's Gelprimer

Product characteristics

Description

Hempel's Gelprimer is a two-component, high build epoxy primer for use as a bond between glass fibre reinforced polyester and antifouling. Also for prevention of osmotic blistering in glass fibre reinforced polyester.

Recommended use

Suitable on glass fibre hulls below the waterline. For professional application where short recoating intervals are required.

Features

- Fast drying.

Product safety

Flash point 25°C [77°F]

VOC content mixed product

Legislation	Value
EU	473 g/L [3.95 lb/US gal]

VOC values may vary with shade, please consult the Safety Data Sheet, section 9.

Handling

Handle with care. Before and during use, observe safety labels on packaging and paint containers and follow all local and national safety regulations. Always consult Hempel's Safety Data Sheet for this product along with the Product Data Sheet.

For professional use only.

Product data

Product code

45580

Product components

Base 45589

Curing Agent 98580

Standard shade / code

Off white 11630

Volume solids

45 ± 2%

Specific gravity

1.4 kg/L [11 lb/US gal]

Reference dry film thickness

100 micron [4.0 mils]

Surface preparation

Cleanliness

- Remove oil, grease and other contaminants by suitable detergent cleaning.
- Clean with Hempel's Pre-Clean.

New build:

- Uncoated surface: Sand and remove all dust.

Maintenance and Repair

- Previously coated surface: Remove old layers of antifouling, primer and loose matter.

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Application

Mixing ratio

Base 45589 : Curing Agent 98580
(8 : 2 by volume)

Stir the Base, add Curing Agent and mix well. Allow mixed paint to rest for several minutes before use to allow air bubbles to escape.

Thinner

Hempel's Thinner 08450

Pot life

Product temperature	10°C [50°F]	20°C [68°F]
Pot life	4 hours	2 hours

Application method

Tool	Thinning max vol.	Application parameters
Airless spray	5%	Not Applicable.
Brush	5%	Not Applicable.
Roller	5%	Not Applicable.

Keep thinning at an absolute minimum. Spray data are indicative and subject to adjustment. Pressure is for a material temperature of 20°C [68°F].

Film thickness

	Recommended
Dry film thickness	100 micron [4.0 mils]
Wet film thickness	222 micron [8.9 mils]
Theoretical spreading rate	4.5 m ² /L [183 sq ft/US gal]

For best performance, avoid excessive film thickness.

Application conditions

- To avoid condensation, apply on a clean and dry surface with a temperature that is at least 3°C [5°F] above the dew point.
- Surface temperature must be above 10°C [50°F] during application and curing.
- Temperature of product must be above 15°C [59°F] during application.

Relative Humidity:

- Relative humidity must be below 85% during drying and curing.

Application remarks

- Stir well before use.
- Do not open or mix the cans before the paint will be applied.
- Apply 1-2 coats of the product.
- For protection (Osmosis): Apply 3 coats of the product.
- Add thinner to assist application if necessary: max 5%.
- Overcoat with chosen antifouling.
- Overcoat two component products with a single component product whilst the surface is almost dry but has a slight tacky feel.

Drying and overcoating

Product compatibility

- Subsequent coat: Recommended products are: Hempel's Antifoulings

Drying time

Surface temperature		10°C [50°F]	20°C [68°F]
Touch dry	hours	4	2
Fully cured	days	14	7

Determined for dry film thickness 100 micron [4.0 mils] at standard conditions, see Hempel's Explanatory Notes for details.

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Overcoating

Hempel's specification supersedes any guidelines indicated in the overcoating table

Quality name		10°C [50°F]	20°C [68°F]	30°C [86°F]
Immersion				
Hempel's Gelprimer	Min	6 h	3 h	2½ h
	Max	6 d	72 h	54 h
Hempaspeed TF	Min	60 min	30 min	30 min
	Max	95 min	65 min	65 min

Drying conditions

- To obtain the drying time stated, it is important to maintain sufficient ventilation during application, drying and curing.
- Condensation on the freshly applied coating should be avoided.

Overcoating details

- If the maximum overcoating interval between epoxy and topcoat is exceeded, apply an additional thin layer of the epoxy.

Other remarks

- The surface must be clean before overcoating.

Storage

Shelf life

Ambient temperature	25°C [77°F]
Base	36 months
Curing Agent	36 months

Shelf life from date of production, when stored in original, unopened containers. Thereafter, the product quality must be re-inspected. Storage at elevated temperatures may reduce shelf life. For advice, please consult Hempel.

Storage conditions

- Temperature must not go below 5°C [41°F] during transport and storage.

Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	12.6 g CO ₂ e/m ²	0.066 lb CO ₂ e/ft ²

The carbon footprint is for 1 square meter / square foot of surface area with a dry film thickness of 1 micron / mil.

The scope includes raw materials, in-bound transport to the Hempel factory, Hempel manufacturing processes, and any Volatile Organic Compounds emitted during and after the application of the product.

It is calculated based on the standard shade defined in this PDS. Values may vary with shade.

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Additional documents

Additional information is available at the Hempel website
<https://www.hempel.com/service-and-support/technical-guidelines>
or at your local Hempel website:

- Explanatory Notes for Product Data Sheet.
- Application methods.

This Product Data Sheet ("PDS") relates to the supplied product ("Product") and is subject to updating from time-to-time. Accordingly, the buyer/applicator should have regard to the PDS supplied together with the relevant batch of the Product (and not an earlier version). In addition to the PDS, the buyer/applicator may receive some or all of the following specifications, statements and/or guidelines as listed below or as are available from the Hempel website under 'Products' at www.hempel.com (the "Additional documents"):

No.	Document description	Location/comments
1.	Technical Statement	One-off specific advice provided on request for specific projects
2.	Specification	Only issued for specific projects
3.	PDS	This document
4.	Explanatory Notes to the PDS	Available at www.hempel.com and contain relevant information about the Product testing parameters
5.	Application Instruction	Where available, at www.hempel.com
6.	Generic technical guidelines (e.g. on application and surface preparation)	Where available, at www.hempel.com

In the event of a conflict of information between the PDS and the Additional documents, the order of priority of information shall be in the order as set out above. In such event you should also contact your representative at Hempel for clarification. Furthermore, the buyer/applicator must have full regard to the relevant Safety Data Sheet provided with each Product and which can also be downloaded from www.hempel.com.

Hempel shall not be liable for defects where the application of the Product has not been made fully in accordance with the recommendations and requirements set out in the relevant PDS and the Additional Documents. The information and terms of this disclaimer apply to this PDS, the Additional documents and any other documents supplied by Hempel in respect of the Product. In addition, the Product is supplied and all technical assistance is given subject to Hempel's General Conditions of Sale, Delivery and Service, unless otherwise expressly agreed in writing.