

Hempel's Sealer 05991

Product characteristics

Description

Hempel's Sealer is a two-component, low viscosity epoxy sealer with good penetration properties. Ideal as a sealer for porous substrates.

Recommended use

For use on wood and plywood. For saturation of glass fibre laminate, when gelcoat has been removed (repair of osmosis damage). For interior and exterior use both above and below the waterline.

Product safety

Flash point 26°C [79°F]

VOC content mixed product

Legislation	Value
EU	606 g/L [5.06 lb/US gal]

According to specific legislation, see details in the Explanatory Notes available at Hempel website, hempel.com or at your local Hempel website.

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.

Product data

Product code

05991

Product components

Base 05999
Curing Agent 95040

Standard shade / code

Transparent 00000

Gloss

Flat

Volume solids

29 ± 2%

Specific gravity

0.9 kg/L [8 lb/US gal]

Reference dry film thickness

30 micron [1.2 mils]

Surface preparation

Cleanliness

- Remove oil, grease and other contaminants by suitable detergent cleaning.

New build:

- Uncoated surface: Wood and plywood: The wood must be completely dry, moisture content below 16%, and should not be primed with any ordinary priming oils or commercial antimould fluids. The wood must be capable of absorbing the sealer completely.
- Glass fibre: All loose/defect gel coat must be removed and any absorbed moisture must have evaporated before applying the product.

Maintenance and Repair

- Previously coated surface: Abrade, clean and dry the surface.

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Application

Mixing ratio

Base 05999 : Curing Agent 95040

(4 : 1 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 845 08451

Cleaner

Hempel's Thinner 845 08451

Pot life

Product temperature	10°C [50°F]
Pot life	16 hours

Application method

Tool	Application parameters
Brush	Not Applicable.

Do not dilute the components separately - only the mixture.

Film thickness

Specification range	Low	High	Recommended
Dry film thickness	30 micron [1.2 mils]	30 micron [1.2 mils]	30 micron [1.2 mils]
Wet film thickness	105 micron [4.2 mils]	105 micron [4.2 mils]	105 micron [4.2 mils]
Theoretical spreading rate	10 m ² /L [407 sq ft/US gal]	10 m ² /L [407 sq ft/US gal]	10 m ² /L [407 sq ft/US gal]

Product may be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate, drying and curing time and overcoating interval.

Application conditions

- Surface temperature must be above 10°C [50°F] during application and curing.

Relative Humidity:

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

Application remarks

- Brush application is recommended to ensure the sealer is worked into the substrate.
- The surface must not appear glossy after application, the coating shall only seal the surface. Any surplus top layer must be removed prior to application of subsequent coat.
- Add thinner to assist application if necessary: max 5%.
- 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

- Previous coat: None.
- Subsequent coat: Recommended products are: Hempel's Light Primer, Hempel's Underwater Primer or Hempel's varnishes

Drying time

Surface temperature		20°C [68°F]	10°C [50°F]
Touch dry	hours	4	8
Ready to sand	hours	24	-
Fully cured	days	7	14

Determined for dry film thickness 30 micron [1.2 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]	
	Atmospheric medium			
Hempel's Light Primer 45551	Min	10 h	4 h	4 h
	Max	Ext*	Ext	Ext
Hempel's Underwater Primer 26030	Min	10 h	4 h	4 h
	Max	Ext*	Ext	Ext
Hempel's Classic Varnish	Min	10 h	4 h	4 h
	Max	Ext*	Ext	Ext

Overcoating times are indicative for products of the same generic chemistry. Consult Hempel's specification for more information.

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.

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

- The curing agent is sensitive to moisture. Store in a dry place and keep the can tightly closed until use.

Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	18.1 g CO ₂ e/m ²	0.094 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.
- Further information: Hempel Yacht Paint Manual and hempelyacht.com

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.