

# 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.

### Features

- Not available.

## 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](http://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<br>[50°F] | 20°C<br>[68°F] |
|---------------------|----------------|----------------|
| Pot life            | 16 hours       | 8 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<br>[1.2 mils]                    | 30 micron<br>[1.2 mils]                    | 30 micron<br>[1.2 mils]                    |
| Wet film thickness         | 100 micron<br>[4 mils]                     | 100 micron<br>[4 mils]                     | 100 micron<br>[4 mils]                     |
| Theoretical spreading rate | 10 m <sup>2</sup> /L<br>[410 sq ft/US gal] | 10 m <sup>2</sup> /L<br>[410 sq ft/US gal] | 10 m <sup>2</sup> /L<br>[410 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<br>[68°F] | 10°C<br>[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<br>[50°F]     |      | 20°C<br>[68°F] |  |
|--|--------------------|------|----------------|--|
|  | Atmospheric medium |      |                |  |
| Hempel's Light<br>Primer 45551         | Min                | 10 h | 4 h            |  |
|  | Max                | Ext* | Ext            |  |
| Hempel's<br>Underwater<br>Primer 26030 | Min                | 10 h | 4 h            |  |
|  | Max                | Ext* | Ext            |  |
| Hempel's Classic<br>Varnish            | Min                | 10 h | 4 h            |  |
|  | Max                | 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<br>[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. Always check the best before date or expiry date on the label.

### Storage conditions

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

## Additional documents

Additional information is available at the Hempel website [hempel.com](http://hempel.com) or at your local Hempel website:

- Explanatory Notes explaining the fields in this Product Data Sheet.
- Surface Preparation Guidelines.
- Application Guidelines for different application methods.
- Further information: Hempel Yacht Paint Manual and [hempelyacht.com](http://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](http://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 <a href="http://www.hempel.com">www.hempel.com</a> and contain relevant information about the Product testing parameters |
| 5.  | Application Instruction  | Where available, at <a href="http://www.hempel.com">www.hempel.com</a>  |
| 6.  | Generic technical guidelines (e.g. on application and surface preparation) | Where available, at <a href="http://www.hempel.com">www.hempel.com</a>  |

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](http://www.hempel.com).

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