

# Hempel's Silic One Tiecoat 27450

## Product characteristics

### Description

Hempel's Silic One Tiecoat is a high solid, silicone based tiecoat for Hempel's Silic One. Secures adhesion between Hempel's Light Primer or Hempel's Conversion Primer and Hempel's Silic One.

### Recommended use

For use as a fouling release system for boats of glass fibre, steel, aluminium and plywood. For use below the waterline.

## Product safety

**Flash point** 33°C [91°F]

### VOC content

Legislation	Value
EU	232 g/L [1.94 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

27450

### Standard shade / code

Cream 23410

### Gloss

Semi-gloss

### Volume solids

67%

### Specific gravity

1.2 kg/L [10 lb/US gal]

### Reference dry film thickness

70 micron [2.8 mils]

## Surface preparation

### Cleanliness

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

### New build:

- Uncoated surface: Prepare bare substrates according to Hempel's primer instruction.

### Maintenance and Repair

- Existing old antifouling: Surfaces in good condition: Apply one coat of Hempel's Conversion Primer .
- Deteriorated surfaces: Remove old antifouling down to the two component primer. Abrade, clean and dry the surface. Apply 1 coat of Hempel's Light Primer.
- Previously coated surface: If the surface is already primed with a two component primer, abrade and apply 1 coat of Hempel's Light Primer.

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## Application

### Thinner

No thinning

### Cleaner

Hempel's Thinner 808 08081

### Application method

Tool	Thinning max vol.	Application parameters
Brush/Roller	No thinning	Not Applicable.

Thinning is not allowed. If the existing primer is a non-epoxy primer or a one component primer, then the primer must be removed, and the surface must be primed with 4-5 coats of Hempel's Light Primer.

### Film thickness

	Recommended
Dry film thickness	70 micron [2.8 mils]
Wet film thickness	105 micron [4.2 mils]
Theoretical spreading rate	10 m <sup>2</sup> /L [407 sq ft/US gal]

### Application conditions

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

### Relative Humidity:

- Relative humidity must be in the range 30-85% during application.  
- Relative humidity must be in the range 30-85% during curing.

### Application remarks

- Stir well before use.
- Apply one coat of Hempel's Silic One Tiecoat.
- Tiecoat application onto Hempel's Light Primer/Hempel's Conversion Primer is a maximum 4 hours / minimum of 2 hours at 20°C ; maximum 8 hours / minimum 4 hours at 10°C.
- Pour paint into paint tray and replace lid. Fully load roller/brush with paint and apply with soft easy strokes to ensure complete coverage. Paint runs can be evened out before the paint dries.

## Drying and overcoating

### Product compatibility

- Previous coat: Recommended products are: Hempel's Light Primer / Hempel's Conversion Primer  
- Subsequent coat: Recommended products are: Hempel's Silic One / Hempel's Silic Pro

### Drying time

Surface temperature		10°C [50°F]	20°C [68°F]	30°C [86°F]
Hard dry	hours	3	1½	1
Fully cured	days	4	2	1

Determined for dry film thickness 70 micron [2.8 mils] at standard conditions, see Hempel's Explanatory Notes for details.

### 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 Silic One Tiecoat 27450	Min	-	-	-
	Max	-	-	-
Hempel's Silic One 77450	Min	16 h	8 h	4 h
	Max	48 h	48 h	24 h
Hempel's Silic Pro 77460	Min	16 h	8 h	4 h
	Max	48 h	48 h	24 h

### 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 overcoating interval is exceeded between Hempel's Light Primer / Hempel's Conversion Primer and Hempel's Silic One Tiecoat, then a new coat of the primer must be applied.

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## Other remarks

- The surface must be clean before overcoating.

## Storage

### Shelf life

<b>Ambient temperature</b>	<b>25°C</b> [77°F]
Product	18 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

- Product must be stored according to local legislation, at 5°C [41°F] without direct sunlight and protected from rain and snow.

## Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	10 g CO <sub>2</sub> e/m <sup>2</sup>	0.052 lb CO <sub>2</sub> e/ft <sup>2</sup>

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.

## 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](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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