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.

Service temperature:
- Minimum, recommended by Hempel for dry exposure: -50°C [-58°F].

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 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: Yellow / 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.

Application

Thinner
No thinning

Cleaner
Hempel's Thinner 808 08081

Hempel's Silic One Tiecoat 27450

Pot life

Product temperature	20°C [68°F]
Pot life	60 min

Application method

Tool	Thinning max vol.	Application parameters
Brush/Roller	No thinning	-

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 m²/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 Max	16 h 48 h	8 h 48 h	4 h 24 h
Hempel's Silic Pro 77460	Min Max	16 h 48 h	8 h 48 h	4 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.

Other remarks

- The surface must be clean before overcoating.

Hempel's Silic One Tiecoat 27450

Storage

Shelf life

Ambient temperature	25°C [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. The shelf life printed on product labels is based on regional climate conditions. For advice, please consult Hempel.

Storage conditions

- Product must be stored according to local legislation, at minimum 5°C [41°F], without direct sunlight and protected from rain and snow.
- The product must be stored in accordance with Safety Data Sheet, label and local regulations. Keep the containers in a dry, shaded, cool, well-ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	12.3 g CO_2e/m^2	0.064 lb CO_2e/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.

Additional documents

Additional information is available at the Knowledge Center: https://www.hempel.com/knowledge-center . The documents below can be found in the Technical Guidelines section: https://www.hempel.com/knowledge-center/technical-guidelines or at the 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.