

# Hempadur Tiecoat 49183

## Product characteristics

### Description

Hempadur Tiecoat 49183 is an anticorrosive two-component epoxy.

### Recommended use

For atmospheric and immersion service used as a "tiecoat" between epoxy and physically drying coatings. For immersion service it can also replace a second anti-corrosive primer coat for the underwater coating system and at the same time act as "tiecoat" for antifouling.

### Service temperature:

- Maximum, dry exposure only: 80°C [176°F].
- Maximum, in sea water: 40°C [104°F].

### Features

- Good anticorrosive properties.
- Acts as "tiecoat" between primer and physically drying coats.

## Product safety

**Flash point** 31°C [88°F]

### VOC content mixed product

| Legislation     | Value                    |
|-----------------|--------------------------|
| EU              | 397 g/L [3.31 lb/US gal] |
| US (coatings)   | 397 g/L [3.31 lb/US gal] |
| US (regulatory) | 397 g/L [3.31 lb/US gal] |
| China           | 397 g/L [3.31 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.

For professional use only.

## Product data

### Product code

49183

### Product components

Base 49187  
Curing agent 98191

### Standard shade\* / code

Light khaki brown 25150

### Gloss

Semi-flat

### Volume solids

57 ± 2%

### Specific gravity

1.3 kg/L [11 lb/US gal]

### Reference dry film thickness

100 micron [3.9 mils]

## Surface preparation

### Cleanliness

- According to Hempel's Specification.

### New build:

- According to Hempel's Specification.

### Maintenance and Repair

- According to Hempel's Specification.

Consult Hempel's separate Surface Preparation Guidelines for more details.

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## Application

### Mixing ratio

Base 49187 : Curing agent 98191  
(7 : 1 by volume)

It is recommended to use fixed volumes/can size for multi-component products. Stir well before use.

### Thinner

Hempel's Thinner 08450

### Cleaner

Hempel's Tool Cleaner 99610

### Pot life

| Product temperature | 20°C<br>[68°F] |
|---------------------|----------------|
| Pot life            | 2½ hours       |

### Application method

| Tool          | Thinning max vol. | Application parameters  |
|---------------|-------------------|---|
| Airless spray | 5%                | Nozzle pressure: 230 bar [3300 psi]<br>Nozzle orifice: 0.023-0.023" |
| Brush         | 5%                | Not Applicable.   |

Lower paint temperatures may require extra thinning, which will result in lower film build and slower drying. Spray data are indicative and subject to adjustment. Pressure is for a material temperature of 20°C [68°F].

### Film thickness

| Specification range        | Low                           | High                           | Recommended                    |
|----------------------------|-------------------------------|--------------------------------|--------------------------------|
| Dry film thickness         | 50 micron<br>[2.0 mils]       | 125 micron<br>[4.9 mils]       | 100 micron<br>[3.9 mils]       |
| Wet film thickness         | 90 micron<br>[3.5 mils]       | 225 micron<br>[9 mils]         | 175 micron<br>[7 mils]         |
| Theoretical spreading rate | 11 m²/L<br>[450 sq ft/US gal] | 4.6 m²/L<br>[190 sq ft/US gal] | 5.7 m²/L<br>[230 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. For best performance, avoid excessive film thickness.

### Application conditions

- Optimal paint temperature for proper mixing, pumping and spraying is: 20-25°C [68-77°F].
- 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 [14°F] during application and curing.

### Relative Humidity:

- Relative humidity must be below 85% during curing.

### Application remarks

- If used as a sealer on old antifouling, any possible leached layer, patina or old layers with weak intercoat adhesion must be removed prior to application.

## Drying and overcoating

### Product compatibility

- Previous coat: According to Hempel's Specification. Recommended product is: Hempadur.
- Subsequent coat: According to Hempel's Specification.

### Drying time

| Surface temperature | 20°C<br>[68°F] |
|---------------------|----------------|
| Surface dry         | min 30         |

Determined for dry film thickness 100 micron [3.9 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                                 |     | 0°C<br>[32°F] | 10°C<br>[50°F] | 20°C<br>[68°F] |
|--|-----|---------------|----------------|----------------|
| Immersion                                    |     |               |                |                |
| Hempel's<br>Antifouling Globic<br>9000 78900 | Min | 23 h          | 10 h           | 5 h            |
|  | Max | 22 d          | 10 d           | 5 d            |
| Atmospheric medium                           |     |               |                |                |
| Hempatex Enamel<br>56360                     | Min | 23 h          | 10 h           | 5 h            |
|  | Max | 27 d          | 12 d           | 6 d            |

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.

## Overcoating details

- If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.
- The surface must be dry and clean prior to application.

## Other remarks

- Epoxy coats have an inherent tendency of chalking in outdoor exposure. This does not affect the performance of the coating.
- Hempel's Specification supersedes any recommendations given in the Product Data Sheets.

## Storage

### Shelf life

| Ambient temperature | 25°C<br>[77°F] |
|---------------------|----------------|
| Base                | 36 months      |
| Curing agent        | 24 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

- Product must be stored according to local legislation, at maximum 40°C [104°F], without direct sunlight and protected from rain and snow.

## 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.
- General Application Guidelines

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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