# Yacht Pro

Products for professional use
2020

# Content

# Primers

# Hempadur Quattro 17634

## Two component epoxy primer

**Materials**
Steel / Aluminium

### Description

Is a two component universal epoxy paint, which cures to a hard and tough coating with good resistance to abrasion, seawater and various oils.

### Recommended use

As a universal epoxy and self-primed high performance coating system for atmospheric or in-water service. Hempadur Quattro 17634 is intended for all year application down to -10°C and for in-shop applications where fast recoating and handling is required.

- Excellent anticorrosive and very good mechanical properties
- Short drying time
- Curing down to -10°C

### Product overview

| | |
|---|---|
| Finish | Semi-flat |
| Volume solids (% - ±2 ) | 72 |
| Theoretical spreading rate | 5.8 $m^2$/L – 125 µm |
| Flash point | 27°C |
| Specific gravity (kg/L) | 1.4 |
| Surface-dry | 2 hours (20°C) |
| VOC (g/L) | 276 |

### Shades and Can sizes

| 12170 | 22090 | 50630 |
|---|---|---|
| Stone Grey<br>20 L | Cream<br>20 L | Red<br>20 L |

### Application details

| | |
|---|---|
| Mixing ratio | Base 17636 + Curing agent 97334<br>4 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Roller | Thinner<br>08450<br>08450<br>08450 |
| Cleaning of tools | Hempel's Tool Cleaner 99610 |
| Pot life (Airless spray, Brush) | 2 hours 20°C |
| Pot life of mixed paint | 3 hours - 15°C, 2 hours - 20°C, 1.5 hour - 25°C, 1 hour - 30°C |
| Film thickness (micron) | 125 (dry) / 175 (wet) |

# Hempel's Light Primer 45550

## Two component epoxy primer

**Materials**
Aluminium / Ferro-cement / Plywood / Steel / Glass fibre

### Description

Is a two component polyamide adduct cured epoxy high build paint. It forms a hard and tough coating resistant to water and petroleum products.

### Recommended use

As a primer below and above the waterline on boats made of aluminium, glass fibre reinforced polyester, plywood and steel. Also for prevention and repair of osmotic blistering in the glass fibre reinforced polyester, and for protection of keels and rudders.

- Excellent adhesion to glass fibre
- Excellent water barrier

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 52 |
| Theoretical spreading rate | 5.2 $m^2$/L – 100 µm |
| Flash point | 25°C |
| Specific gravity (kg/L) | 1.3 |
| Dry to touch | 3-4 hours (20°C)<br>6-8 hours (10°C) |
| VOC (g/L) | 433 |

### Shades and Can sizes

| 11630 | 12170 | 19990 |
|---|---|---|
| Off White<br>5 L | Stone Grey<br>5 L | Black<br>5 L |

### Application details

| | |
|---|---|
| Mixing ratio | Base 45559 + Curing Agent 95360<br>2 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Roller | Thinner<br>08450<br>08450<br>08450 |
| Cleaning of tools | Hempel's Tool Cleaner 99610<br>Hempel's Thinner 08450 |
| Pot life (Airless spray) | 2 approx. hours 20°C |
| Pot life (Brush) | 6 approx. hours 20°C |
| Film thickness (micron) | 100 (dry) / 200 (wet) |
| Overcoating interval (min) | According to separate application instructions |
| Overcoating interval (max) | According to separate application instructions |

# Hempadur 45143

## Two component epoxy primer

**Materials**
Steel / Aluminium / Composite / Wood

### Description

Is a two component, polyamide adduct cured epoxy paint with good wetting properties and low water permeability. It is self-priming and forms a hard and tough coating which has good resistance against abrasion and impact as well as to seawater, mineral oils, aliphatic hydrocarbons and splashes from petrol and related products. Harmless to grain cargoes.

### Recommended use

- As a high build primer, intermediate and/or finishing coat in (heavy duty) paint systems according to specification. (As a finishing coat where a cosmetic appearance is of less importance).
- For repair and maintenance work at application temperatures above -10°C on hatch covers, decks, in cargo holds and ballast tanks etc. Hempadur 45143 is intended for use in cold/temperate climates.

### Product overview

| | |
|---|---|
| Finish | Semi-gloss |
| Volume solids (% - ±1 ) | 60 |
| Theoretical spreading rate | 4 $m^2$/L – 150 µm |
| Flash point | 25°C |
| Specific gravity (kg/L) | 1.3 |
| Surface-dry | 2 hours (20°C) |
| VOC (g/L) | 367 |

### Shades and Can sizes

| 11480 | 12170 | 19870 | 19990 | 56460 |
|---|---|---|---|---|
| Mid Grey<br>5 \| 20 L | Stone Grey<br>20 L | Grey<br>5 \| 20 L | Black<br>5 \| 20 L | Insignia Red<br>5 \| 20 L |

### Application details

| | |
|---|---|
| Mixing ratio | Base 45148 + Curing agent 97430<br>3 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Roller | Thinner<br>08450<br>08450<br>08450 |
| Cleaning of tools | Hempel's Tool Cleaner 99610<br>Hempel's Thinner 08450 |
| Pot life (Airless spray) | 2 hours 15°C |
| Pot life (Brush) | 4 hours 15°C |
| Film thickness (micron) | 150 (dry) / 250 (wet) |

# Hempel's Gel Primer 45580

## Two component primer

**Materials**
Glass fibre

### Description

Is a two component polyamide adduct cured epoxy high build paint. Fast to recoat.

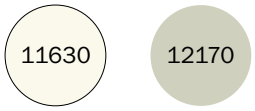
### Recommended use

As a primer for antifouling paints on boats made of glass fibre reinforced polyester. Especially designed for professional user applications where short recoating intervals are needed.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 45 |
| Theoretical spreading rate | 4.5 $m^2$/L – 100 µm |
| Flash point | 32°C |
| Specific gravity (kg/L) | 1.4 |
| Dry to touch | 2 hours (20°C)<br>4 hours (10°C) |
| VOC (g/L) | 475 |

### Shades and Can sizes




Off White
5 L

Stone Grey
5 L

### Application details

| | | | |
|---|---|---|---|
| Mixing ratio | Base 45589 + Curing Agent 98580<br>4 : 1 by volume | | |
| Application method (tools)<br>• Airless spray<br>• Roller | Thinner<br>08450<br>08450 | | |
| Cleaning of tools | Hempel's Thinner 08450<br>Hempel's Tool Cleaner 99610 | | |
| Pot life (Airless spray) | 2 hour(s) 20°C<br>4 hour(s) 10°C | | |
| Film thickness (micron) | 100 (dry) / 225 (wet) | | |
| Overcoating interval | **5°C** | **10°C** | **20°C** |
| • Min<br>• Max | 12 hours<br>12 days | 6 hours<br>6 days | 3 hours<br>3 days |

# Hempadur 47182

## Anticorrosive two component primer

**Materials**
Steel

### Description

Is an anticorrosive two component, modified polyamide adduct cured 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 one anti-corrosive primer coat for the underwater coating system and at the same time act as “tiecoat” for antifouling or it may also be used as a “sealer” for old antifoulings.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 62 |
| Theoretical spreading rate | 5 $m^2$/L – 125 µm |
| Flash point | 28°C |
| Specific gravity (kg/L) | 1.4 |
| Dry to touch | 6 hours (20°C) |
| VOC (g/L) | 365 |

### Shades and Can sizes

25150

Yellowish Grey
20 L

### Application details

| | |
|---|---|
| Mixing ratio | Base 47188 + Curing agent 98470<br>7 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Roller | Thinner<br>08450<br>08450<br>08450 |
| Cleaning of tools | Hempel’s Tool Cleaner 99610 |
| Pot life | 2 hour(s) 20°C |
| Film thickness (micron) | 125 (dry) / 200 (wet) |

# Hempadur 15570

## Two component epoxy primer

**Materials**
Steel

### Description

Is a two component, polyamide-adduct cured epoxy paint, which cures to a strong and highly corrosion resistant coating, at temperatures down to -10°C. The Micaceous Iron Oxide pigmented reddish grey 12430 shade is also well suited for application under humid conditions, on damp steel surfaces, and may be applied on moist surfaces.

### Recommended use

As a maintenance and repair primer, intermediate, and/or finishing coat in Hempadur systems in severely corrosive environment. As a finishing coat where a cosmetic appearance is of less importance. As a low temperature curing epoxy primer, intermediate, and/or finishing coat in paint systems according to specification. Well suited as a (blast) primer in epoxy systems.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 54 |
| Theoretical spreading rate | 5.4 $m^2$/L – 100 µm |
| Flash point | 25°C |
| Specific gravity (kg/L) | 1.4 |
| Surface-dry | 1 hour (20°C) |
| VOC (g/L) | 415 |

### Shades and Can sizes


Reddish Grey
5 | 20 L

Red
20 L

### Application details

| | |
|---|---|
| Mixing ratio | Base 15579 + Curing Agent 95570<br>3 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Air spray<br>• Brush<br>• Roller | Thinner<br>08450<br>08450<br>08450<br>08450 |
| Cleaning of tools | Hempel's Tool Cleaner 99610 |
| Pot life | 2 hour(s) 20°C |
| Film thickness (micron) | 100 (dry) / 200 (wet) |

# Hempadur 15553

## Two-component epoxy paint

**Materials**
Steel / Aluminium

### Description

It cures to a flexible, well adhering coating with good abrasion and impact resistance. Contains zinc phosphate. Cures down to -10°C.

### Recommended use

As a primer for systems on hot dipped galvanized, aluminium and stainless steel surfaces in moderately to severely corrosive environments.

Hempadur 15553 is also suited when roughening of the surface is not possible. Please see surface preparation overleaf.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 55 |
| Theoretical spreading rate | 11 $m^2$/L – 50 µm |
| Flash point | 30°C |
| Specific gravity (kg/L) | 1.5 |
| Surface-dry | 20 minutes (20°C) |
| VOC (g/L) | 387 |

### Shades and Can sizes

11320

Light Yellowish Grey
20 L

### Application details

| | |
|---|---|
| Mixing ratio | Base 15557 + Curing agent 98021<br>3 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Roller | Thinner<br>08450<br>08450<br>08450 |
| Cleaning of tools | Hempel's Tool Cleaner 99610 |
| Pot life | 2 hours 20°C |
| Film thickness (micron) | 50 (dry) / 100 (wet) |

# Hempadur 35560

## Two-component epoxy paint

**Materials**
Steel

### Description

Is a solvent-free, two-component, high-build, polyamine adduct cured epoxy paint, which cures to a coating with good resistance to fresh water.

### Recommended use

As a lining in potable water tanks and pipelines. As a self-primed, high build coating primarily for areas subject to abrasion and/or to a highly corrosive environment; E.g. splash zones, jetty and bridge pilings and decks.

### Certificates/Approvals

Conforms to NORSOK M-501, edition 6, system nos. 7A and 7B.
Approved by WRAS for potable water up to 35°C.
Certified by NSF International to NSF/ANSI standard 61- Drinking Water System Components - Health Effects.

- Excellent anti-corrosive properties
- Solvent free
- Benzyl alcohol free

### Product overview

| | |
|---|---|
| Finish | Glossy |
| Volume solids (% - ±1 ) | 100 |
| Theoretical spreading rate | 5 $m^2$/L – 200 µm |
| Flash point | 100°C |
| Specific gravity (kg/L) | 1.4 |
| Surface-dry | 12 approx. hours (20°C) |
| VOC (g/L) | 0 |

### Shades and Can sizes

20320

Cream
19.4 L

### Application details

| | |
|---|---|
| Mixing ratio | Base 35569 + Curing Agent 98560<br>6.8 : 2 by volume |
| Application method (tools) | Thinner |
| • Airless spray<br>• Brush<br>• Roller | Do not dilute<br>Do not dilute<br>Do not dilute |
| Cleaning of tools | Hempel's Tool Cleaner 99610 |
| Pot life | 1.5 hours 20°C<br>45 minutes 35°C |
| Film thickness (micron) | 200 (dry) / 200 (wet) |

# Hempel's High Protect II 35780

## Two component epoxy primer

**Materials**
Glass fibre / Steel

### Description

Is a two-component, solvent-free, high-build epoxy for osmosis protection and treatment. Easy to apply with good tolerance to environmental conditions. Forms a hard, tough, water-resistant coating.

### Recommended use

For use as a primer below the waterline on boats made of glass fibre or steel. Prevention and repair of osmotic blistering in the glass fibre both above and below the waterline.

### Product overview

| | |
|---|---|
| Finish | High gloss |
| Volume solids (% - ±1 ) | 100 |
| Theoretical spreading rate | 6.6 $m^2$/L – 150 µm |
| Flash point | 129°C |
| Specific gravity (kg/L) | 1.3 |
| Dry to touch | 12 hours (20°C)<br>24 hours (10°C) |
| VOC (g/L) | 34 |

### Shades and Can sizes


Grey
2.5 L

Cream
2.5 L

### Application details

| | | |
|---|---|---|
| Mixing ratio | Base 35789 + Curing agent 95078<br>3 : 2 by volume | |
| Application method (tools)<br>• Brush<br>• Roller | Thinner<br>Do not dilute<br>Do not dilute | |
| Cleaning of tools | Hempel's Thinner 08450 | |
| Pot life | 45 minutes 20°C<br>1 hour 10°C | |
| Film thickness (micron) | 150 (dry) / 150 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 18 hours<br>11 days | 8 hours<br>5 days |

# Hempadur Mastic 45880

## Two component epoxy paint

**Materials**
Steel / Aluminium

### Description

Is a two-component polyamide adduct cured, high solids, high build epoxy paint. It forms a hard and tough coating, has good wetting properties and low temperature curing.

### Recommended use

As a selfprimed, surface tolerant paint system or as an intermediate or finishing coat in heavy duty paint systems where low VOC and high film build are required. For immersed areas Hempel's Mastic 45880 is only recommended for minor repairs. Can be specified where extended recoating properties for polyurethane topcoats are requested typically travel coating). May be used directly on cured zinc silicate (Galvosil products) or spraymetallized surfaces to minimize popping.

### Product overview

| | |
|---|---|
| Finish | Semi-gloss |
| Volume solids (% - ±1 ) | 80 |
| Theoretical spreading rate | 6.4 $m^2$/L – 125 µm |
| Flash point | 25°C |
| Specific gravity (kg/L) | 1.5 |
| Dry to touch | 3 hours (20°C) |
| VOC (g/L) | 216 |

### Shades and Can sizes


White
20 L

Stone Grey
20 L

Red
20 L

### Application details

| | |
|---|---|
| Mixing ratio | Base 45889 + Curing Agent 95880<br>3 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Roller | Thinner<br>08450<br>08450<br>08450 |
| Cleaning of tools | Hempel's Tool Cleaner 99610 |
| Pot life (Airless spray) | 1 hour 20°C |
| Pot life (Brush) | 2 hours 20°C |
| Film thickness (micron) | 125 (dry) / 150 (wet) |

# Hempadur Easy 47700

## Two component epoxy paint

**Materials**
Steel

### Description

Is a two-component high build pure epoxy paint which cures to a hard and tough coating with good resistance to abrasion and sea water.

### Recommended use

As a self-primed heavy duty coating or intermediate coat for immersed and nonimmersed areas exposed to abrasion and corrosive climate such as cargo holds, ship hulls, working decks or steel structures where low VOC, fast drying and high film build are required. Hempadur Easy 47700 is intended for all year application down to -10°C and for applications where fast recoating and handling is required.

- Excellent anticorrosive and very good mechanical properties
- Short drying time
- Curing down to -10°C

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 77 |
| Theoretical spreading rate | 6.2 $m^2$/L – 125 µm |
| Flash point | 25°C |
| Specific gravity (kg/L) | 1.5 |
| Surface-dry | 1 hour (20°C) |
| VOC (g/L) | 236 |

### Shades and Can sizes

| 11480 | 50630 |
|---|---|
| Mid Grey<br>20 L | Red<br>20 L |

### Application details

| | |
|---|---|
| Mixing ratio | Base 47709 + Curing agent 97702<br>4 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Roller | Thinner<br>08450<br>08450<br>08450 |
| Cleaning of tools | Hempel's Tool Cleaner 99610<br>Hempel's Thinner 08450 |
| Pot life (Airless spray) | 1 hour 20°C |
| Pot life (Brush) | 1.5 hours 20°C |
| Film thickness (micron) | 125 (dry) / 175 (wet) |

# Hempinol 10220

## High-build coating

**Materials**
Steel

### Description

Physically drying, high-build, bituminous coating.

### Recommended use

For inexpensive short to medium-term anticorrosive protection of interior and exterior steelwork not exposed to direct sunlight. Not resistant to continuous mechanical stress.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 53 |
| Theoretical spreading rate | 3 $m^2$/L – 175 µm |
| Flash point | 38°C |
| Specific gravity (kg/L) | 1.3 |
| Surface-dry | 10 approx. hours (20°C) |
| VOC (g/L) | 324 |

### Shades and Can sizes

19990

Black
4 | 18 L

### Application details

| | |
|---|---|
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Roller | Thinner<br>08080<br>08080<br>08080 |
| Cleaning of tools | Hempel's Thinner 08080 |
| Film thickness (micron) | 175 (dry) / 325 (wet) |

# Hempalin Primer 12050

## One component primer

**Materials**
Steel

### Description

Is a relatively quick-drying alkyd primer containing zinc phosphate.

### Recommended use

General purpose primer for Hempalin systems for protection of steel in mild to medium atmospheric corrosive environments.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 49 |
| Theoretical spreading rate | 12.3 m2/L – 40 µm |
| Flash point | 38°C |
| Specific gravity (kg/L) | 1.3 |
| Surface-dry | 45 minutes (20°C) |
| Film thickness (micron) | 40 (dry) / 75 (wet) |
| VOC (g/L) | 324 |

### Shades and Can sizes

40760
Green
5 | 20 L

50410
Brown
5 | 20 L

### Application details

| | |
|---|---|
| Application method (tools)<br>• Airless spray<br>• Brush<br>• Air spray<br>• Roller | Thinner<br>08230<br>08230<br>08230<br>08230 |
| Cleaning of tools | Hempel's Thinner 08230 |
| Film thickness (micron) | 175 (dry) / 325 (wet) |

# Hempatex Hi-Build 46330

## One component primer

**Materials**
Steel

### Description

Is based on chlorinated rubber. Physically drying. Resistant to salt water, splashes of mineral oils, aliphatic solvents and a wide range of chemicals, but not to animal and vegetable oils or aromatic solvents.

### Recommended use

Selfprimed, or as an intermediate or finishing coat on steel structures in moderately to severely corrosive environment, including permanently submerged surfaces.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 42 |
| Theoretical spreading rate | 5.3 $m^2$/L – 80 µm |
| Flash point | 32°C |
| Specific gravity (kg/L) | 1.3 |
| Surface-dry | 1 hour (20°C) |
| VOC (g/L) | 510 |

### Shades and Can sizes

| 19990 | 50630 | 12170 |
|---|---|---|
| Black | Red | Stone Grey |
| 5 L | 20 L | 5 L |

### Application details

| Application method (tools) | Thinner |
|---|---|
| • Airless spray | Do not dilute |
| • Air spray | Do not dilute |
| • Brush | Do not dilute |
| • Roller | Do not dilute |
| Cleaning of tools | Hempel's Thinner 08080 |
| Film thickness (micron) | 80 (dry) / 175 (wet) |

# Hempel's Uni-Primer 13140

## One component primer

**Materials**
Steel

### Description

Is a quick-drying, one-component primer with rust-inhibiting pigments.

### Recommended use

As a versatile primer on steel and metal surfaces for Hempalin or Hempatex in mild to medium corrosive atmospheric environment. It provides the possibility of reducing the number of primers for maintenance.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 42 |
| Theoretical spreading rate | 8.4 $m^2$/L – 50 µm |
| Flash point | 30°C |
| Specific gravity (kg/L) | 1.3 |
| Dry to touch | 15 minutes (20°C) |
| VOC (g/L) | 518 |

### Shades and Can sizes


Light Yellowish Grey
20 L

Red
5 L

### Application details

| Application method (tools) | Thinner |
|---|---|
| • Airless spray | 08080 |
| • Air spray | 08080 |
| • Brush | 08080 |
| • Roller | 08080 |
| Cleaning of tools | Hempel's Thinner 08080 |
| Film thickness (micron) | 50 (dry) / 125 (wet) |

# Hempalin Primer High-Build 13200

## One component alkyd primer

**Materials**
Steel

### Description

Is a quick-drying, urethane-modified alkyd primer.

### Recommended use

General purpose primer for Hempalin systems for protection of steel in mild to medium atmospheric corrosive environments.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 47 |
| Theoretical spreading rate | 6.3 $m^2$/L – 75 µm |
| Flash point | 38°C |
| Specific gravity (kg/L) | 1.3 |
| Surface-dry | 2 hours (20°C) |
| VOC (g/L) | 407 |

### Shades and Can sizes

10000

White
20 Litres

### Application details

| | |
|---|---|
| Application method (tools) | Thinner |
| • Airless spray<br>• Brush<br>• Roller | 08080<br>08080<br>08080 |
| Cleaning of tools | Hempel's Thinner 08080 |
| Film thickness (micron) | 75 (dry) / 175 (wet) |

# Hempel's Underwater Primer 26030

## One component primer

**Materials**
Glass fibre / Wood / Steel

### Description

Is a fast drying underwater primer containing aluminium flakes. For use as a sealer onto old antifouling or as a tiecoat over an epoxy primed surface before antifouling.

### Recommended use

Suitable on glass fibre, wood and steel. For use on all areas below the waterline including keels.

- Excellent adhesion performance
- Can be applied on unknown antifouling – sealer properties
- Seal leaching of copper from old antifouling

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 39 |
| Theoretical spreading rate | 7.8 $m^2$/L – 50 µm |
| Flash point | 35°C |
| Specific gravity (kg/L) | 1.1 |
| Dry to touch | 3 hours (20°C)<br>6 hours (10°C) |
| VOC (g/L) | 476 |

### Shades and Can sizes

19000

Aluminium
5 L

### Application details

| Application method (tools) | Thinner | |
|---|---|---|
| • Airless spray<br>• Air spray<br>• Brush<br>• Roller | 08080<br>08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 50 (dry) / 125 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 6 hours<br>None | 3 hours<br>None |

# Hempadur 85671

**Materials**
Steel

## Description

Is a two-component, amine adduct cured phenolic epoxy (novolac) coating with very good adhesion and high temperature, water and chemical resistance.

## Recommended use

As an interior lining in tanks, pipelines, rail cars etc. for hot water, brine, crude oil, vegetable oils, molten sulfur and other chemicals as per the Chemical Resistance Guide, only shades 11150 and 50900. All other shades can only be used as an external coating for the protection of insulated (CUI) and uninsulated process pipework and vessels including cryogenic conditions.

## Certificates/Approvals

Approved by WRAS for potable water up to 23°C. Shades: 11150/50900.

Conforms to Norsok M-501, system no. 3C, 3D, 3E and 3F.

## Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 68 |
| Theoretical spreading rate | 6.8 $m^2$/L – 100 µm |
| Flash point | 25°C |
| Specific gravity (kg/L) | 1.7 |
| Surface-dry | 1.5 hours (20°C) |
| VOC (g/L) | 317 |

## Shades and Can sizes

11630

Off White
20 L

## Application details

| | |
|---|---|
| Mixing ratio | Base 85675 + Curing agent 97371<br>8.8 : 1.2 by volume<br>13.8 : 1.0 by weight |
| Application method (tools)<br>• Airless spray<br>• Brush | Thinner<br>08450<br>08450 |
| Cleaning of tools | Hempel's Tool Cleaner 99610 |
| Pot life | 3 hours 20°C |
| Film thickness (micron) | 100 (dry) / 150 (wet) |

# Fillers

# Hempel's Profiller 35370

## Two component epoxy filler

**Materials**
Steel/ Glass fiber

### Description

Is a two component, lightweight epoxy filler, featuring high adhesion and water resistance, when fully cured is easy to sand. Can be applied in coats up to 10-12 mm for a uniform smooth film build.

### Recommended use

As a filler and fairing compound, especially suitable for profiling large areas and detailed fairing where structural strength is important. It can be used on most primed rigid substrates, above and below the waterline.

### Benefits

- Complete hull profiling
- Minimum weight when profiling the surface
- Minimum shrinkage during drying
- Optimises man-hours

- For use above and below the waterline
- Low density
- Quick cure properties
- Excellent sanding characteristics

### Product overview

| | |
|---|---|
| Finish | Semi-gloss |
| Volume solids (% - ±1 ) | 100 |
| Theoretical spreading rate | 1 $m^2$/L – 1 mm |
| Flash point | 101°C |
| Specific gravity (kg/L) | 0.7 |
| Dry to touch | 6 hours (20°C)<br>12 hours (10°C) |
| VOC (g/L) | 2 |

### Shades and Can sizes

49500

Light Green
5 L

### Application details

| | | |
|---|---|---|
| Mixing ratio | Base 35379 + Curing agent 95720<br>1 : 1 by volume | |
| Application method (tools)<br>• Spatula / Trowel | Thinner<br>Do not dillute | |
| Cleaning of tools | Hempel's Degreaser 99611<br>Hempel's Thinner 08450 | |
| Pot life | 45 minute(s) 20°C | |
| Film thickness (micron) | As required (dry) / As required (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 48 hours<br>None | 24 hours<br>None |

# Antifoulings

# Hempel's Mille NCT 71880

## Self - polishing antifouling

**Materials**
Glass fibre / Wood / Plywood / Steel

### Description

Is a high performance self-polishing antifouling based on Hempel's patented binder technology where the self-polishing is controlled by sea waters interaction with binder. The powerful bioactive mixture and self-renewing effect result in a sustained antifouling protection. Mille NCT 71880 is compatible with virtually all other antifouling system.

### Recommended use

Suitable for boats made of glass fibre, wood, plywood and steel. Do not use on aluminium or other light-alloy metals. Risk of corrosion in case of direct contact.

- Excellent colour retention
- Compatible with virtually all other antifouling systems

### Product overview

| | |
|---|---|
| Finish | Semi-flat |
| Volume solids (% - ±1 ) | 50 |
| Theoretical spreading rate | 12.5 $m^2$/L – 40 µm |
| Flash point | 33°C |
| Specific gravity (kg/L) | 1.7 |
| Dry to touch | 2 hours (20°C)<br>4 hours (10°C) |
| VOC (g/L) | 423 |

### Shades and Can sizes

| 19990 | 37110 | 56460 |
|---|---|---|
| Black<br>5 L | Dark Blue<br>5 L | Insignia Red<br>5 L |

### Application details

| | | |
|---|---|---|
| Application method (tools)<br>• Air spray<br>• Brush<br>• Roller | Thinner<br>08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 40 (dry) / 75 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 8 hours<br>None | 4 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 9 months | |

# Hempel's Mille NCT (white) 7188W

## Self - polishing antifouling

**Materials**
Glass fibre / Wood / Plywood / Aluminium / Steel

### Description

Is a high performance self-polishing antifouling based on Hempel's patented binder technology where the self-polishing is controlled by sea waters interaction with binder. The powerful bioactive mixture and self-renewing effect results in a sustained antifouling protection. Mille NCT is compatible with virtually all other antifouling systems.

### Recommended use

Is ideal for all type of boats providing an excellent performance for a whole season. Suitable for boats made of glass fibre, wood, plywood, steel and aluminium.

- Excellent colour retention
- Compatible with virtually all other antifouling systems
- Can be applied on aluminium with suitable priming

### Product overview

| | |
|---|---|
| Finish | Semi-flat |
| Volume solids (% - ±1 ) | 53 |
| Theoretical spreading rate | 13.3 $m^2$/L – 40 µm |
| Flash point | 34°C |
| Specific gravity (kg/L) | 1.5 |
| Dry to touch | 2 hours (20°C)<br>4 hours (10°C) |
| VOC (g/L) | 406 |

### Shades and Can sizes

10000

White
5 L

### Application details

| | | |
|---|---|---|
| Application method (tools)<br>• Air spray<br>• Brush<br>• Roller | Thinner<br>08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 40 (dry) / 75 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 8 hours<br>None | 4 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 9 months | |

# Hempel's Mille White 71150

## Self - polishing antifouling

**Materials**
Glass fibre / Wood / Plywood / Steel

### Description

Is a high performance, self-polishing antifouling providing excellent protection all season.

### Recommended use

As an antifouling for boats of glass fibre, wood, plywood, steel and aluminium.

### Product overview

| | |
|---|---|
| Finish | Semi-flat |
| Volume solids (% - ±1 ) | 53 |
| Theoretical spreading rate | 13.3 $m^2$/L – 40 µm |
| Flash point | 35°C |
| Specific gravity (kg/L) | 1.4 |
| Dry to touch | 4 hours (20°C)<br>8 hours (10°C) |
| VOC (g/L) | 407 |

### Shades and Can sizes

10000

White
5 | 20 L

### Application details

| | | |
|---|---|---|
| Application method (tools)<br>• Air spray<br>• Brush<br>• Roller | Thinner<br>08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 40 (dry) / 75 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 8 hours<br>None | 4 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 6 months | |

# Hempel's Hard Racing TecCel 76880

## Hard matrix antifouling

**Materials**
Glass fibre / Wood / Plywood / Steel

### Description

Is a hard antifouling (insoluble matrix) based on cuprous oxide. It changes to its final colour after approximately 1 week of immersion in water.

### Recommended use

As an antifouling for boats of glass fibre, wood, plywood and steel. Do not use on aluminium or other light-alloy metals. Risk of corrosion in case of direct contact. For power boats and regatta yachts.

- Contains TecCel
- Reduced friction
- Increased speed

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 49 |
| Theoretical spreading rate | 12.3 $m^2$/L – 40 µm |
| Flash point | 28°C |
| Specific gravity (kg/L) | 1.6 |
| Dry to touch | 4 hours (20°C)<br>8 hours (10°C) |
| VOC (g/L) | 437 |

### Shades and Can sizes

| 17801 | 19990 | 30390 | 37110 | 56460 |
|---|---|---|---|---|
| Pepper Grey<br>5 L | Black<br>5 L | True Blue<br>5 L | Dark Blue<br>5 L | Insignia Red<br>5 L |

### Application details

| Application method (tools) | Thinner | |
|---|---|---|
| • Air spray<br>• Brush<br>• Roller | 08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 40 (dry) / 75 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 8 hours<br>None | 4 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 9 months | |

# Hempel's Hard Racing White 76300

## Hard matrix antifouling

**Materials**
Glass fibre / Wood / Plywood / Aluminium / Steel

### Description

Is a high performance, hard antifouling providing excellent protection all season.

### Recommended use

As an antifouling for boats of glass fibre, wood, plywood, steel and aluminium. For power boats and regatta yachts.

- Can be applied on aluminium with suitable priming
- Reduced friction
- Increased speed

### Product overview

| | |
|---|---|
| Finish | Semi-flat |
| Volume solids (% - ±1 ) | 54 |
| Theoretical spreading rate | 13.5 $m^2$/L – 40 µm |
| Flash point | 39°C |
| Specific gravity (kg/L) | 1.4 |
| Dry to touch | 4 hours (20°C)<br>8 hours (10°C) |
| VOC (g/L) | 388 |

### Shades and Can sizes

10101

Ultra White
5 L

### Application details

| | | |
|---|---|---|
| Application method (tools)<br>• Air spray<br>• Brush<br>• Roller | Thinner<br>08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 40 (dry) / 75 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 8 hours<br>None | 4 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 6 months | |

# Hempel's Classic 71220

## Self-polishing antifouling

**Materials**
Glass fibre / Wood / Plywood / Steel

### Description

Is an efficient polishing (erodible) antifouling providing good protection all season.

### Recommended use

As an antifouling for boats of glass fibre, wood, plywood and steel. Do not use on aluminium or other light-alloy metals. Risk of corrosion in case of direct contact. Suitable for crusing speeds.


### Product overview

| | |
|---|---|
| Finish | Semi-flat |
| Volume solids (% - ±1 ) | 50 |
| Theoretical spreading rate | 12.5 $m^2$/L – 40 µm |
| Flash point | 37°C |
| Specific gravity (kg/L) | 1.4 |
| Dry to touch | 4 hours (20°C)<br>8 hours (10°C) |
| VOC (g/L) | 424 |

### Shades and Can sizes


Black
5 L

True Blue
5 L

Red Brown
5 L

### Application details

| | | |
|---|---|---|
| Application method (tools)<br>• Air spray<br>• Brush<br>• Roller | Thinner<br>08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 40 (dry) / 75 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 8 hours<br>None | 4 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 4 weeks | |

# Hempel's Aluxtra 71260

## Self-polishing antifouling

**Materials**
Glass fibre / Wood / Plywood / Aluminium / Steel

### Description

Is a high performance, self-polishing antifouling providing excellent protection all season. Especially suited for aluminium boats. Bright, clean colour make it a good choice for all below waterline areas including sterngear and propellers.

### Recommended use

As an antifouling for boats of glass fibre, wood, plywood, steel and aluminium.

- Self-polishing antifouling
- Good protection

### Product overview

| | |
|---|---|
| Finish | Semi-flat |
| Volume solids (% - ±1 ) | 54 |
| Theoretical spreading rate | 13.5 $m^2$/L – 40 µm |
| Flash point | 34°C |
| Specific gravity (kg/L) | 1.4 |
| Dry to touch | 4 hours (20°C)<br>8 hours (10°C) |
| VOC (g/L) | 394 |

### Shades and Can sizes

| 10000 | 19990 | 37110 |
|---|---|---|
| White | Black | Dark Blue |
| 5 L | 5L | 5 L |

### Application details

| Application method (tools) | Thinner | |
|---|---|---|
| • Air spray<br>• Brush<br>• Roller | 08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 40 (dry) / 75 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 8 hours<br>None | 4 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 6 months | |

# Hempel's Tiger Xtra 71000

## Self - polishing antifouling

**Materials**
Glass fibre / Wood / Plywood / Steel

### Description

Is a high performance, conventional, erodible antifouling providing excellent protection all season.

### Recommended use

As an antifouling for boats of glass fibre, wood, plywood and steel. Do not use on aluminium or other light alloy metals. Risk of corrosion in case of contact. For power and sailing boats.

- Excellent protection
- Ensures high mechanical strength

### Product overview

| | |
|---|---|
| Finish | Semi-flat |
| Volume solids (% - ±1 ) | 51 |
| Theoretical spreading rate | 12.8 $m^2$/L – 40 µm |
| Flash point | 33°C |
| Specific gravity (kg/L) | 1.7 |
| Dry to touch | 4 hours (20°C)<br>8 hours (10°C) |
| VOC (g/L) | 422 |

### Shades and Can sizes

| 30390 | 19990 | 56460 | 12400 | 31750 | 37110 |
|---|---|---|---|---|---|
| True Blue<br>5 L | Black<br>5 L | Insignia Red<br>5 L | Grey<br>5 L | Souvenirs Blue<br>5 L | Dark Blue<br>5 L |

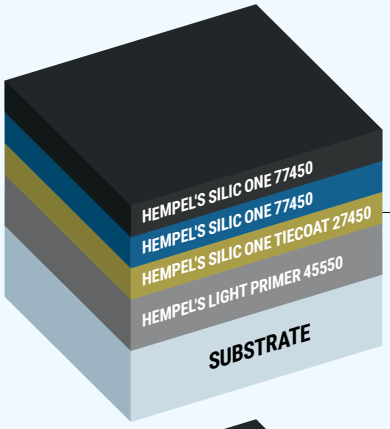
### Application details

| | | |
|---|---|---|
| Application method (tools)<br>• Air spray<br>• Brush<br>• Roller | Thinner<br>08080<br>08080<br>08080 | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Film thickness (micron) | 40 (dry) / 75 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 8 hours<br>None | 4 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 6 months | |

# Fouling Release System

# Hempel’s Fouling Release systems

Hempel’s fouling release systems are biocide free and based on silicone and hydrogel, which gives the coating surface water-like properties making it difficult for fouling organisms to attach to the hull and easy for them to be removed when the boat is in motion.



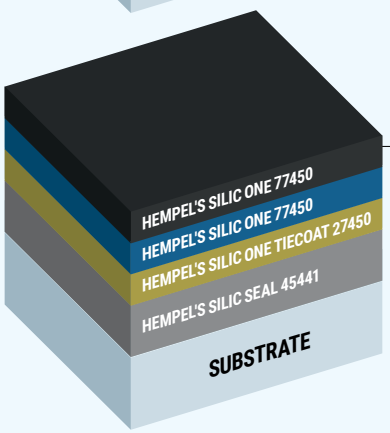

**Specification for Hempel’s Silic One 77450**

On an uncoated surface

| | |
|---|---|
| 4 × Hempel’s Light Primer 45550 | 300 micron DFT |
| 1 × Hempel’s Silic One Tiecoat 27450 | 67 micron DFT |
| 1 × Hempel’s Silic One 77450 | 80 micron DFT |
| 1 × Hempel’s Silic One 77450 | 80 micron DFT |

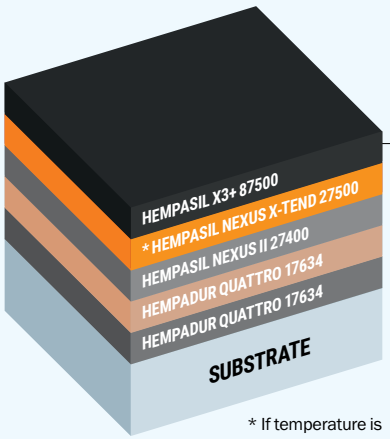
On a previously epoxy coated surface

| | |
|---|---|
| 1 × Hempel’s Light Primer 45550 | 60 micron DFT |
| 1 × Hempel’s Silic One Tiecoat 27450 | 67 micron DFT |
| 1 × Hempel’s Silic One 77450 | 80 micron DFT |
| 1 × Hempel’s Silic One 77450 | 80 micron DFT |




On a previously Antifouling coated surface

| | |
|---|---|
| 1 × Hempel’s Silic Seal 45441 | 25 micron DFT |
| 1 × Hempel’s Silic One Tiecoat 27450 | 67 micron DFT |
| 1 × Hempel’s Silic One 77450 | 80 micron DFT |
| 1 × Hempel’s Silic One 77450 | 80 micron DFT |




* If temperature is below 10°C

**Specification for Hempasil X3+**

On an uncoated surface

| | |
|---|---|
| 1 × Hempadur Quattro 17634 | 125 micron DFT |
| 1 × Hempadur Quattro 17634 | 125 micron DFT |
| 1 × Hempasil Nexus 27400 | 100 micron DFT |
| 1 x Hempasil Nexus X-tend 27500 | 120 micron DFT<br>(If temperature is below 10°C) |
| 1 × Hempasil X3+ 87500 | 150 micron DFT |

# Hempel's Silic One 77450

**Materials**
Glass fibre / Steel / Aluminium

## Description

Is a high solid one component fouling release coating. Hempel's Silic One 77450 is based on silicone, is biocide free and cures by air humidity.

Hempel's Silic One 77450 provides a smooth, low surface energy repellent surface with unique fouling release properties. A hydro gel micro layer prevents fouling organisms firmly adhering, while the silicone polymers facilitate self-cleaning.

## Recommended use

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

## Product overview

| | |
|---|---|
| Finish | Brillant |
| Volume solids (% - ±2 ) | 80 |
| Theoretical spreading rate | 10 $m^2$/L – 80 µm |
| Flash point | 47°C |
| Specific gravity (kg/L) | 1 |
| Dry to touch | 3 hours (20°C)<br>5 hours (10°C) |
| VOC (g/L) | 119 |

## Shades and Can sizes

| 19990 | 59151 | 30390 |
|---|---|---|
| Black<br>2.5 L | Red<br>2.5 L | True Blue<br>2.5 L |

- Easy to apply
- Easy to clean

## Application details

| Application method (tools) | Thinner | |
|---|---|---|
| • Brush<br>• Roller | Do not dillute<br>Do not dillute | |
| Cleaning of tools | Hempel's Thinner 08080 | |
| Pot life | 1 hour after opening the can. | |
| Film thickness (micron) | 80 (dry) / 100 (wet) | |
| Overcoating interval | **10°C** | **20°C** |
| • Min<br>• Max | 16 hours<br>None | 16 hours<br>None |
| Launching | Min: 24 hours (20°C)<br>Max: 1 month | |

# Hempel's Silicone Remover 99450

Is an effective, solvent based paint remover which can be used on silicone based surfaces.

**Recommended use**
As a paint remover for Hempel's Silic One Fouling Release system and other silicone based coatings.

# Hempel's Silic One Tiecoat 27450

**Materials**
Glass fibre / Steel / Aluminium

## Description

Is a high solid, silicone based humidity curing tiecoat for Hempel's Silic One 77450. Secures adhesion between Hempel's Light Primer 45550 and Hempel's Silic One 77450.

## Recommended use

Also for use as a touch-up and repair of damaged areas. Suitable on Glass fibre, steel, aluminium and plywood.
For use below the waterline.

## Product overview

| | |
|---|---|
| Finish | Semi-gloss |
| Volume solids (% - ±1 ) | 67 |
| Theoretical spreading rate | 10 $m^2$/L – 67 µm |
| Flash point | 31°C |
| Specific gravity (kg/L) | 1.2 |
| Dry to touch | 3 hours (20°C)<br>5 hours (10°C) |
| VOC (g/L) | 233 |

## Shades and Can sizes

23410

Yellow
2.5 L

## Application details

| | |
|---|---|
| Application method (tools)<br>• Brush<br>• Roller | Thinner<br>Do not dillute<br>Do not dillute |
| Cleaning of tools | Hempel's Thinner 08080 |
| Pot life | 1 hour after opening the can. |
| Film thickness (micron) | 67 (dry) / 100 (wet) |

# Hempel's Silic Seal 45441

**Materials**
Glass fibre / Steel / Aluminium

## Description

Is a two component epoxy to enable easy conversion from antifouling to Hempel's Silic One Fouling Release System. Can be applied on previously painted antifouling in good condition.

## Recommended use

For use as a sealer on antifouling to secure adhesion between antifouling and Hempel's Silic One Tiecoat 27450. For use on all substrates excluding wood.

## Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 36 |
| Theoretical spreading rate | 14.4 $m^2$/L – 25 µm |
| Flash point | 30°C |
| Specific gravity (kg/L) | 1.2 |
| Dry to touch | 1 hour (20°C)<br>2 hours (10°C) |
| VOC (g/L) | 542 |

## Shades and Can sizes

50711

Light red
2.5 L

## Application details

| | |
|---|---|
| Mixing ratio | Base 45445 + Curing agent 95441<br>3 : 1 by volume |
| Application method (tools)<br>• Brush<br>• Roller | Thinner<br>Do not dillute<br>Do not dillute |
| Cleaning of tools | Hempel's Thinner 08450 |
| Pot life | 8 hour(s) 20°C |
| Film thickness (micron) | 25 (dry) / 75 (wet) |

# Hempasil Nexus II 27400

## Three component tiecoat

**Materials**
Glass fibre / Steel / Aluminium

### Description

Is a three component silicone based tiecoat with anticorrosive properties.

### Recommended use

As a sealer/tiecoat for the Hempaguard®/Hempasil Systems.

- **Maintenance, Antifouling systems**
  The product is designed for the purpose of recoating old antifouling systems with a Hempaguard®/Hempasil topcoat, creating a link between the aged antifouling system and the Hempaguard®/ Hempasil topcoat. This is feasible provided the general condition of the old antifouling system is good.

- **Maintenance/New Build, Full system**
  The product is designed to be used as a bridging tiecoat between approved anticorrosive primers and Hempaguard®/ Hempasil topcoat.
  Used in combination with Hempasil Nexus X-tend 27500 for full coat applications of the Hempaguard®/Hempasil topcoats. Minimum curing temperature for this system is 0°C.

### Product overview

| | |
|---|---|
| Finish | Flat |
| Volume solids (% - ±1 ) | 56 |
| Theoretical spreading rate | 5.6 $m^2$/L – 100 µm |
| Flash point | 24°C |
| Specific gravity (kg/L) | 1.4 |
| Surface-dry | 1 hour (20°C) |
| Through-dry | 18 hours (10°C) |
| VOC (g/L) | 388 |

### Shades and Can sizes

11070

Light Grey
20 L

### Application details

| | |
|---|---|
| Mixing ratio | Base 27409 + Curing agent 98160<br>Hempel's Nexus Additive 99710<br>13.9 : 3.6 : 2.5 |
| Application method (tools)<br>• Airless spray | Thinner<br>Do not dillute |
| Cleaning of tools | Hempel's Thinner 08450<br>Hempel's Tool Cleaner 99610 |
| Pot life | 1 hour(s) 20°C |
| Film thickness (micron) | 100 (dry) / 175 (wet) |
| Overcoat interval, min | According to specification. |
| Overcoat interval, max | According to specification. |

# Hempasil Nexus X-tend 27500

## One component tiecoat

**Materials**
Glass fibre / Steel / Aluminium

### Description

Is a high solids, one component, silicone based humidity curing tiecoat for Hempaguard®/Hempasil topcoats.

### Recommended use

- As a tiecoat for the Hempaguard®/Hempasil topcoats used for touch-up and repair of damaged areas of existing silicone top coats securing the adhesion between the anticorrosive system and the Hempaguard®/Hempasil topcoat. Minimum curing temperature: 5°C.
- As a low temperature tiecoat used in combination with Hempel's Nexus II 27400 for full coat applications of the Hempaguard®/Hempasil topcoats. Minimum curing temperature for this system is 0°C.

### Product overview

| | |
|---|---|
| Finish | Semi-gloss |
| Volume solids (% - ±1 ) | 65 |
| Theoretical spreading rate | 5.4 $m^2$/L – 120 µm |
| Flash point | 28°C |
| Specific gravity (kg/L) | 1.2 |
| Dry to touch | 3 hours (20°C) |
| VOC (g/L) | 252 |

### Shades and Can sizes

23410

Yellow
5 | 20 L

### Application details

| | |
|---|---|
| Application method (tools)<br>• Airless spray | Thinner<br>Do not dillute |
| Cleaning of tools | Hempel's Thinner 08080 |
| Pot life | 1 hour(s) 20°C |
| Film thickness (micron) | 120 (dry) / 175 (wet) |
| Overcoat interval, min | According to specification. |
| Overcoat interval, max | According to specification. |

# Hempasil X3+ 87500

## Two component fouling release coating

**Materials**
Glass fibre / Steel / Aluminium

### Description

Is a third generation fouling release coating based on silicone hydrogel. Hempasil X3+ is biocide free, two-component and has a high solids content.

Hempasil X3+ provides a smooth, low surface energy and repellent surface with unique fouling release properties. A hydrogel micro layer prevents fouling organisms from firmly adhering and provides self-cleaning properties.

Therefore, Hempasil X3+ possesses a high fuel saving potential compared to traditional antifoulings. During extended idle periods the coating may accumulate some fouling. Hempasil X3+ does not contain organotin compounds acting as biocides and complies with the International Convention on the Control of Harmful Antifouling Systems on Ships as adopted by IMO, October 2001

(IMO document AFS/CONF/26).

### Recommended use

For vessels with service speeds above 8 knots. The product can also be used for propellers. Also ideal for use in power plant water inlets on pipes and grates to prevent biofouling.

### Product overview

| | |
|---|---|
| Finish | Glossy |
| Volume solids (% - ±1 ) | 71 |
| Theoretical spreading rate | 4.7 $m^2$/L – 150 µm |
| Flash point | 28°C |
| Specific gravity (kg/L) | 1 |
| Dry to touch | 3 approx. hours (20°C) |
| VOC (g/L) | 260 |

### Shades and Can sizes

| 19990 | 30170 | 59151 |
|---|---|---|
| Black<br>20 L | Blue<br>20 L | Red<br>20 L |

### Application details

| | |
|---|---|
| Mixing ratio | Base 87509 + Crosslinker: 98951<br>17.8 : 2.2 by volume |
| Application method (tools)<br>• Airless spray | Thinner<br>Do not dillute |
| Cleaning of tools | Hempel's Thinner 08080 |
| Pot life | 2 hour(s) 20°C |
| Film thickness (micron) | 150 (dry) / 225 (wet) |
| Overcoat interval, min | According to specification. |
| Overcoat interval, max | According to specification. |
| Launching | Min: 24 hours |

# Hempaguard X7 89900

**Materials**
Glass fibre / Steel / Aluminium

## Description

Is an advanced fouling defence coating based on ActiGuard® technology which utilizes the added effect of advanced hydrogel silicone and an efficient fouling preventing biocide. This boosts the antifouling barrier and prolongs the fouling free period. Hempaguard X7 therefore possesses a high fuel saving potential and is also suitable for vessels operating with long service intervals (up to 90 months) and/or very long idle periods (up to 120 days). Hempaguard X7 is an advanced fouling defence coating with high solids content. The product is based on silicone, and cures after addition of Crosslinker 98980.

## Recommended use

For all vessels, with no limitation on service speeds, including slow/ultraslow steaming vessels and FPSO's.

The product is also suitable for propellers. This product does not contain organotin compounds acting as biocides and complies with the International Convention on the Control of Harmful Antifouling Systems on Ships as adopted by IMO October 2001 (IMO document AFS/CONF/26).

## Product overview

| | |
|---|---|
| Finish | Glossy |
| Volume solids (% - ±1 ) | 70 |
| Theoretical spreading rate | 4.7 $m^2$/L – 150 µm |
| Flash point | 28°C |
| Specific gravity (kg/L) | 1 |
| Dry to touch | 3 hours (20°C) |
| VOC (g/L) | 260 |

## Shades and Can sizes

| 19740 | 59161 |
|---|---|
| Black<br>20 L | Red<br>20 L |

## Application details

| | |
|---|---|
| Mixing ratio | Base 89909 + Crosslinker 98980<br>17.8 : 2.2 by volume |
| Application method (tools)<br>• Airless spray | Thinner<br>Do not dillute |
| Cleaning of tools | Hempel's Thinner 08080 |
| Pot life | 1 hour 20°C after addition of Crosslinker |
| Film thickness (micron) | 150 (dry) / 225 (wet) |
| Overcoat interval, min | According to specification. |
| Overcoat interval, max | According to specification. |
| Launching | Minimum: 24 hours |

# Topcoats

# Hempalin Enamel 52140

## One component topcoat

**Materials**
Steel / Wood

### Description

Is a glossy alkyd enamel which forms a weather resistant coating. It is flexible and resistant to salt water and spillage of mineral oil and other aliphatic hydrocarbons.

### Recommended use

As a general purpose finishing coat in alkyd systems on exterior and interior steel and woodwork in mildly to moderately corrosive environment. As a finishing coat in engine rooms including tank tops, main engines and auxiliary machinery.

### Product overview

| | |
|---|---|
| Finish | Glossy |
| Volume solids (% - ±1 ) | 46 |
| Theoretical spreading rate | 15.3 $m^2$/L – 30 µm |
| Flash point | 38°C |
| Specific gravity (kg/L) | 1.1 |
| Dry to touch | 3 hours (20°C) |
| VOC (g/L) | 429 |

### Shades and Can sizes


White
5 | 20 L

Black
5 | 20 L

Multitint
5 | 20 L

### Application details

| | |
|---|---|
| Application method (tools)<br>• Airless spray<br>• Air spray<br>• Brush<br>• Roller | Thinner<br>08230<br>08230<br>08230<br>08230 |
| Cleaning of tools | Hempel's Thinner 08230 |
| Film thickness (micron) | 30 (dry) / 75 (wet) |

# Hempel's Polyenamel 55102

## Two component topcoat

**Materials**
Glass-fibre / Polyester reinforced with glassfibre or wood

### Description

Is a two-component, high-gloss acrylic polyurethane enamel cured with aliphatic isocyanate, with good gloss and colour retention.

### Recommended use

As a glossy decorative finishing coat in severely corrosive atmospheric environments. Excellent adherence on glass-fibre, polyester reinforced with glassfibre or wood. Direct adhesion on various substrates properly prepared such as treated aluminium, passivated stainless steel, passivated galvanized steel and also on properly primed steel.

### Product overview

| | |
|---|---|
| Finish | High - gloss |
| Volume solids (% - ±1 ) | 52 |
| Theoretical spreading rate | 14.9 $m^2$/L – 35 µm |
| Flash point | 35°C |
| Specific gravity (kg/L) | 1.2 |
| Surface-dry | 2 hours (20°C) |
| VOC (g/L) | 435 |

### Shades and Can sizes

Multitint
5 | 20 L

### Application details

| | |
|---|---|
| Mixing ratio | Base 55107 + Curing agent 95304<br>4 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Air spray<br>• Roller | Thinner<br>08080<br>08080<br>08080 |
| Cleaning of tools | Hempel's Thinner 08080 |
| Pot life | 2 approx. hours 20°C |
| Film thickness (micron) | 35 (dry) / 75 (wet) |

# Hempathane Topcoat 55210

## Two component topcoat

**Materials**
Glass-fibre / Polyester reinforced with glassfibre or wood

### Description

Is a two-component, glossy acrylic polyurethane coating, cured with aliphatic isocyanate, with good gloss and colour retention.

### Recommended use

As a finishing coat for protection of structural steel in severely corrosive atmospheric environment, where light-fastness and gloss retention are required. Minimum temperature for curing is -10°C.

### Product overview

| | |
|---|---|
| Finish | Glossy |
| Volume solids (% - ±1 ) | 51 |
| Theoretical spreading rate | 10.2 $m^2$/L – 50 µm |
| Flash point | 33°C |
| Specific gravity (kg/L) | 1.2 |
| Surface-dry | 2 hours (20°C) |
| VOC (g/L) | 442 |

### Shades and Can sizes

Multitint
20 L

### Application details

| | |
|---|---|
| Mixing ratio | Base 55219 + Curing agent 95370<br>7 : 1 by volume |
| Application method (tools)<br>• Airless spray<br>• Air spray<br>• Roller | Thinner<br>08080<br>08080<br>08080 |
| Cleaning of tools | Hempel's Thinner 08080 |
| Pot life | 4 hour(s) 20°C |
| Film thickness (micron) | 50 (dry) / 100 (wet) |

# Hempatex Enamel 56360

**Materials**
Steel

## Description

Is a finishing coat based on acrylic resin and nonchlorinated plasticizer for optimum gloss and colour retention. Physically drying. Resistant to salt water, splashes of aliphatic hydrocarbons and animal and vegetable oils..

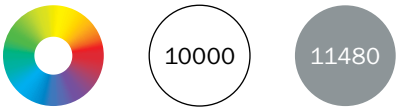
## Recommended use

As an interior and exterior finishing coat in Hempatex systems in moderately to severely corrosive environment.

## Product overview

| | |
|---|---|
| Finish | Glossy |
| Volume solids (% - ±1 ) | 32 |
| Theoretical spreading rate | 9.1 $m^2$/L – 35 µm |
| Flash point | 41°C |
| Specific gravity (kg/L) | 1.1 |
| Dry to touch | 1 hour (20°C) |
| VOC (g/L) | 594 |

## Shades and Can sizes




Multitint
5 | 20 L

White
5 | 20 L

Mid Grey
20 L

## Application details

| Application method (tools) | Thinner |
|---|---|
| • Airless spray | 08080 |
| • Air spray | 08080 |
| • Brush | 08080 |
| • Roller | 08080 |
| Cleaning of tools | Hempel's Thinner 08080 |
| Film thickness (micron) | 35 (dry) / 100 (wet) |
| Overcoat interval, min | According to specification. |
| Overcoat interval, max | According to specification. |

# Thinners & Cleaners

# Thinner

| Product name | Quality & shade | Can size (L) |
|---|---|---|
| Hempel's Thinner 08080 | 08080-00000 Clear | 5 |
| Hempel's Thinner 08450 | 08450-00000 Clear | 5 & 20 |
| Hempel's Thinner 08230 | 08230-00000 Clear | 5 & 20 |

# Cleaner

| Product name | Quality & shade | Can size (L) |
|---|---|---|
| Hempel's Tool Cleaner 99610 | 99610-00000 Clear | 5 |

# Health & Safety

## This section is made with the sole purpose of increasing the health and safety awareness of Hempel Customers.

**Hempel expects:**

- That the personal protection equipment is used according to the recommendations.
- That all local laws and regulations are complied with.

It is the expectation of the authors that the Health and Safety section will increase awareness and inspire others to learn more about how to avoid risks to health and safety.

## Safety Data Sheets

Main hazard and precautionary information are provided on labels. The Safety data sheet (SDS) provides you with not only the main, but much more and detailed information. With the label and the information provided in the SDS, will help you to make sure that the product can be used safely.

A Safety Data Sheet is a document that provides detailed information about a hazardous product, including: Its identity and its ingredients; Its physical, health and environmental hazards; Workplace exposure standards; Safe handling and storage procedures; First aid procedures; Transport information and other useful information. It is divided into 16 sections

Safety data sheets are available on www.HEMPEL.com and www.HEMPELYacht.com

| Pictograms | Hazard class |
|---|---|
|  | **Explosive**<br>Self-reactive substances and mixtures<br>Organic peroxides |
|  | **Flammable** gases, aerosols, liquids or solids<br>Self-reactive substances and mixtures. Pyrophoric liquids and solids. Self-heating substances. Substances, which in contact with water, emit flammable gases. Organic peroxides |
|  | **Oxidising** substances |
|  | **Gas under pressure**<br>Compressed gasses. Liquefied gasses<br>Refrigerated gasses. Dissolved gasses |
|  | **Corrosive**<br>Corrosive to metals<br>Skin corrosion<br>Severe eye damage |
|  | **Toxic** (acute health hazard)<br>Acute toxicity - via inhalation, skin contact or ingestion. These substances/mixtures can cause death, injury or seriously harm health within 72 hours of a single exposure |
|  | **Harmful**<br>Irritant to eyes and skin<br>Skin sensitization<br>Respiratory tract irritation<br>Narcotic effects |
|  | **Chronic health hazard**<br>Products, which are Carcinogenic (can cause cancer), Mutagenic (can permanently change DNA), Reproductive toxic (can cause impaired fertility / birth defects), Respiratory sensitizers (can cause e.g. asthma) |
|  | **Hazardous to environment**<br>Environmental effects - both acute and chronic |

# Personal Protective Equipment

Personal Protective Equipment (PPE) is used to protect workers in a specific work situation against health and safety risk. PPE is also required according to national legislation. In order to protect your PPE, you need to clean and maintain your PPE according to recommendations from the supplier.

# General good practice

**Around the paint products**

Read the Product Data Sheet (PDS) and the Safety Data Sheet (SDS) carefully as they contain information related to how to protect yourself and what to do in case of an accident. Access to both PDS and SDS shall be readily available on www.hempel.com

- Refer to safety/product data sheets for product information and content.
- Always read the label thoroughly and contact us if you're not sure how to use the products.
- Wear the appropriate personal protective equipment (PPE).
- Provide adequate ventilation for the product used. If necessary, use a respirator. Don't breathe vapour/spray.
- Open cans with care.
- Immediately clean up spills.
- Do not eat or drink in the vicinity of stored or applied paint.
- Do not swallow. If swallowed, immediately seek medical advice and show the container/label.
- Some products may cause irritation, always seek medical advice if you're concerned.
- Where possible, removed waste antifouling paint, e.g. waste paint in cans and old paint scraped off of hulls, should be collected and disposed of safely.
- Contact your local authority for information on waste disposal.

**Storage**

- Do not store the paint in direct sunlight.
- A paint locker must be well ventilated and the light installed must be explosion proof. The locker must be in compliance with local legislation.
- When painting, protect the cans from dust and dirt.
- Keep the lids closed during storage.
- Secure all cans from falling down in bad weather.
- Do not leave thinners in open cans during storage.
- Using thinner will often lower the flash point and create a higher potential risk of explosion.
- Extra ventilation is required when using thinners as cleaning agent.
- Do not smoke or use open fire when handling paints.
- Spillage must be removed/cleaned immediately. The waste must be stored in special containers - personal protection as gloves/goggles and often respirators must be used when handling paints.

## Around the paint application

Brush & Roller

The correct PPE shall be used during application and cleaning. A certain amount of ventilation is necessary.

Spray equipment

- Good maintenance - repairs before break down means improved safety.
- Only tested hoses, spray guns and fittings designed for maximum output pressure for each individual pump must be used.
- It is important that the pump is grounded to the subject to avoid explosion/fire from sparks created by static electricity.
- Safety nozzle tips to be used on airless equipment.
- Do not point an airless gun at anybody.
- Be careful when using a powerful agitator/mixer to avoid paint/thinner splashing anybody.
- Full personal protection equipment is necessary when checking WFT during spray application.

General good practice: Around the work-site

- Keep the work-site clean and tidy.
- Smoking is allowed in designated areas only.
- Maintain safety and explosion proof lights.
- Ensure proper ventilation is maintained.
- Ensure that all work permits are available and valid.

## Personal Protection

Ensure you wear suitable protective clothing, including gloves and glasses. Read labels carefully and follow all application and health & safety advice. Open cans with care. Don't eat or drink in the vicinity of stored or applied paint.

| | What are the hazards | The equipment to use |
|---|---|---|
|  Eyes | Chemical splash, dust, paint particles and droplets, projectiles, vapour. | Safety spectacles, goggles, face shields, visors. |
|  Breathing | Breathing dust, vapour, fumes, aerosols, oxygen-deficient atmospheres, paint particles. | **Short term filtering mask** against dust while sanding. **Half facemask** for sanding and painting, can be disposable or with replaceable filter cartridges. **Full air feed facemask** for spray painting. |
|  Hands | Abrasion, cuts and punctures, impact, chemicals, solvents, liquid paints, skin infection. | Leather gloves, latex gloves, armlets. |
|  Hands | Dust, dirt, oil and grease, paint particles. | **Barrier cream:** short term protection. **Cleaning cream:** designed to remove contaminates and cause least skin damage. **Maintenance cream:** to help restore the skin's natural protective layers. |

| | What are the hazards | The equipment to use |
|---|---|---|
|  Hearing | Damage to inner ear from loud or constant noise levels. | Ear defenders, ear muffs, ear plugs. |
|  Body | Chemical or paint splash, spray from spray guns, impact or penetration, dust, excessive wear or entanglement of own clothing. | Overalls, coveralls. |
|  Feet | Wet, slipping, cuts and punctures, falling objects, chemical and paint splash, abrasion. | Steel toe protection and anti-slip soles. May be a pre-requisite on some sites. |
|  Head | Impact from falling objects, head bumping, hair entanglement. | A range of helmets and bump caps. |

# Yacht Pro

Products for professional use
2020

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As a world-leading supplier of trusted coating solutions, Hempel is a global company with strong values, working with customers in the protective, marine, decorative, container and yacht industries. Hempel factories, R&D centres and stock points are established in every region.

Across the globe, Hempel's coatings protect surfaces, structures and equipment. They extend asset lifetimes, reduce maintenance costs and make homes and workplaces safer and more colourful. Hempel was founded in Copenhagen, Denmark in 1915. It is proudly owned by the Hempel Foundation, which ensures a solid economic base for the Hempel Group and supports cultural, social, humanitarian and scientific purposes around the world.

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