

## Silic One system

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## Our most efficient antifouling solution

hempelyacht.com







# If you are searching for the **ONE** that will:

- ✓ keep your boat fouling-free
- ✓ save you from re-painting every year
- ✓ save you money
- ✓ save on fuel
- $\checkmark$  save the environment



**Silic One** is The **ONE**. The premium antifouling.

More than 10 years of boat owners' trust in Silic One! **Thank you.** 

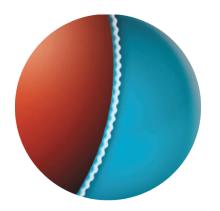


## Hempel's Silic One Our best peforming antifouling with proven track record for 2 year fouling protection.



Biocide-free solution 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.

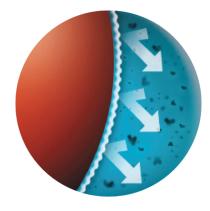
## What is hydrogel?



Unique, non-reactive polymers

form a hydrogel layer between

the substrate and water.



Fouling organisms perceive the hull as a liquid and consequently have difficulty in attaching.

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## Switching to Silic One is easy.

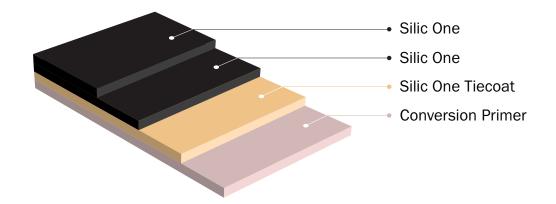
## **Overcoating existing antifouling**

## Surface preparation

Remove all loose/brittle layers. Abrade. Rinse carefully with freshwater and allow the surface to dry.

### Application

Apply layers of the system as indicated below:



| Can be overcoated after:        |                    |      |           |      |           |      |           |  |
|---------------------------------|--------------------|------|-----------|------|-----------|------|-----------|--|
| Layers                          | Hempel's           | 10°C |           | 20°C |           | 30°C |           |  |
|                                 |                    | Min  | Max       | Min  | Max       | Min  | Мах       |  |
| 1.                              | Conversion Primer  | 4h   | 8h        | 2h   | 4h        | 1h   | 2h        |  |
| 2.                              | Silic One Tiecoat* | 16h  | 48h       | 8h   | 48h       | 4h   | 24h       |  |
| 3.                              | Silic One**        | 16h  | No max*** | 16h  | No max*** | 8h   | No max*** |  |
| 4.                              | Silic One          |      |           |      |           |      |           |  |
|                                 |                    |      |           |      |           |      |           |  |
| To be immersed after final coat |                    | 36h  | 1 month   | 24h  | 1 month   | 24h  | 1 month   |  |

\*Apply Silic One Tiecoat as soon as previous coat of Conversion Primer is dry to touch. The Silic One Tiecoat must be applied to full coverage to ensure adhesion.

\*\* For the first time application apply 2 coats of Silic One. Every 2 years apply only one coat.

\*\*\*After 48 hours surface **must** be cleaned with a suitable detergent, rinsed with fresh water and allowed to dry before applying the next coat. Overcoating must be carried out as soon as possible after surface has dried.



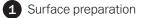


Silic One Tiecoat



Silic One

## 4 easy steps:







3 Silic One Tiecoat



4 Silic One



## **Boats without antifouling**

#### Surface preparation

Clean with a suitable detergent and sand with dry abrasive paper (P120). Carefully clean with water and allow the surface to dry.

#### Application

Apply layers of the system as indicated below:



Silic One Tiecoat

Silic One

Silic One Silic One Silic One Tiecoat Light Primer

Light Primer

Note: New gelcoats need to be epoxy primed to a minimum of 300 micron dry film thickness.

| Can be overcoated after:        |                    |      |           |      |           |      |           |  |
|---------------------------------|--------------------|------|-----------|------|-----------|------|-----------|--|
| Layers                          | Hempel's           | 10°C |           | 20°C |           | 30°C |           |  |
|                                 |                    | Min  | Max       | Min  | Max       | Min  | Max       |  |
| 1.                              | Light Primer       | 4h   | 8h        | 2h   | 4h        | 1h   | 2h        |  |
| 2.                              | Silic One Tiecoat* | 16h  | 48h       | 8h   | 48h       | 4h   | 24h       |  |
| 3.                              | Silic One**        | 16h  | No max*** | 16h  | No max*** | 8h   | No max*** |  |
| 4.                              | Silic One          |      |           |      |           |      |           |  |
|                                 |                    |      |           |      |           |      |           |  |
| To be immersed after final coat |                    | 36h  | 1 month   | 24h  | 1 month   | 24h  | 1 month   |  |

\*The Silic One Tiecoat must be applied to full coverage to ensure adhesion.

\*\* For the first time application apply 2 coats of Silic One. Every 2 years apply only one coat. \*\*\*After 48 hours surface **must** be cleaned with a suitable detergent, rinsed with fresh water and allowed to dry before applying the next coat. Overcoating must be carried out as soon as possible after surface has dried.

## Silic One for propellers

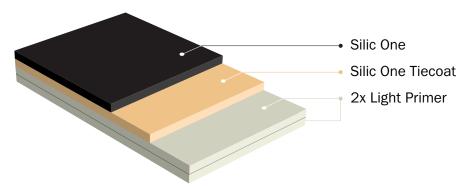
## Surface preparation

- Remove old antifouling first
- Clean with a suitable detergent such as Hempel's Pre-Clean (for aluminium propellers make sure that Hempel's Pre-Clean has been thinned 1:20)
- Create a palpable roughness by abrading with 40 grit sand paper or other mechanical methods, preferably abrasive blasting. Wash with freshwater and allow to dry. Apply the primer as fast as possible to avoid oxidation



#### Application

Apply layers of the system as indicated below:



|   | Can be overcoated after:        |                               |      |         |      |         |      |         |
|---|---------------------------------|-------------------------------|------|---------|------|---------|------|---------|
| L | .ayers                          | Hempel's                      | 10°C |         | 20°C |         | 30°C |         |
|   |                                 |                               | Min  | Max     | Min  | Max     | Min  | Max     |
|   | 1.                              | Light Primer<br>(thinned 20%) | 8h   | 60d     | 4h   | 30d     | 3h   | 22d     |
|   | 2.                              | Light Primer<br>(thinned 5%)  | 4h   | 8h      | 2h   | 4h      | 1h   | 2h      |
|   | 3.                              | Silic One Tiecoat             | 16h  | 48h     | 8h   | 48h     | 4h   | 24h     |
|   | 4.                              | Silic One                     |      |         |      |         |      |         |
|   |                                 |                               |      |         |      |         |      |         |
| ٦ | To be immersed after final coat |                               | 36h  | 1 month | 24h  | 1 month | 24h  | 1 month |

Pain(t)less. Never seen before...



Hempel's Infinity

Hempel's Silic One

## Cleaning

High speed motor boats Hempel's Silic One is **self-cleaning** on motor boats.

#### Slow speed boats & sailboats

The coating can be cleaned as frequently as desired/required, thus maintaining a perfectly clean surface with extremely low friction.

Hempel's Silic One is **easy to clean**. You can use one of two following options:

### Option 1

Use a high pressure, fresh water wash to clean the surface.

#### Option 2

Use a dense sponge or a cloth and then rinse with a hose.



## Maintenance

Maintenance of Hempel's Silic One is easy and simple. Maintenance cost is lower compared to traditional antifouling. In order to maintain the system, a new layer of Hempel's Silic One should be applied every second year.

The Silic One System performs more effectively if the boat remains in the water. If the boat is used in areas of high environmental conditions, or kept out of the water for an extended period, it may be necessary to apply a new layer of Hempel's Silic One every year or recharge it with Hempel's Infinity.

## **Hempel's Infinity**

Revolutionary recharger for Silic One system.



Hempel proudly introduces the absolute revolutionary product solution -Hempel's Infinity, the unique water-based recharger for Hempel's Silic One. Infinity offers extension of the silicone performance for an extra season and enables less work, less costs and less paint used, while offering more savings and more time on the water.





Hempel's Infinity

## How to recharge the Silic One system with Hempel's Infinity

## **Surface preparation**

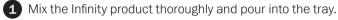
Clean the underwater area with a suitable detergent such as Hempel's Pre-Clean. Rinse with freshwater. Allow to dry.



Tools: Long haired roller or wide brush.

## Application







2 Apply Infinity to the whole underwater surface.

Application stroke direction is not relevant as long as the entire underwater surface is covered.

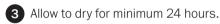
## Tool option 1: Brush





## **Tool option 2: Roller**













## Pain(t)less. Never seen before...



- ✓ Less costs
  ✓ More savings
- ✓ Less work

✓ Less painting

- ✓ More free time
- ✓ More sailing



## Less is more.

Still not using Silic One system?

More than 10 years of boat owners' trust in Silic One! **Thank you.** 



## FAQ

#### Is Silic One more expensive than traditional antifouling?

No, first time application cost is higher but over the years, cost is massively reduced due to one coat application every 2 years with less time and work needed.

## Will I save fuel with Silic One?

Yes, due to easy cleaning of the surface, coating will be free from fouling and the hull will have less friction in the water.

## Can I go faster with Silic One?

Yes, the reduced friction of a clean coating will increase speed.

## Is it possible to overcoat Silic One with traditional antifouling?

Silic One will have to be removed if you want to convert to traditional antifouling. Only fouling release coatings will stick to Silic One.

### At what speed will the self cleaning take effect?

At faster speeds the self cleaning will be most effective. Even at lower speed self cleaning is possible with constant use.

### Should I be afraid of too slippery surface when lifting the boat on slings?

No, you should simply secure the lifting straps to each other to prevent them spreading apart when lifting.

## Silic One is soft. Does it encounter a lot of mechanical damage?

When scratching with a nail, the silicone may feel mechanically weak, but when the force is applied on a larger area, for instance with a fender, the silicone has a good abrasive resistance. This is primarily because the coating is soft and absorbs the energy.

### What do I do if my Silic One gets a scratch?

It is easy to repair; simply re-build the paint system in the damaged area.

## Will it be a problem if the applied surface is not completely smooth?

No, you will have the same performance even though the paint surface is not complete smooth.

## Can Silic One be applied on all types of propeller materials?

Silic One for propeller can be applied on all types of metals and alloys. Epoxy and fiberglass based composits is also possible. Remember to use primer before applying the Silic One System.

## How do I know if I get enough paint on the propeller?

You should apply as much paint as possible, but without sagging.

#### **Can Silic One be removed?**

Yes. You can use Hempel's Silicone Remover available in 5I cans. Contact your local shop for ordering the product.

## Why does the layer of Conversion Primer lack opacity?

The product is designed to form a bond between existing antifouling and Silic One system. Full opacity is not necessary.

#### Do weather conditions influence the application of Infinity?

Infinity has little to no dependency on the weather conditions. It can be applied down to a minimum 5°C.

## Is there a need to mask the waterline before applying Infinity?

There is no need for masking the waterline.

## Is sanding required before applying Infinity?

Sanding is not required before applying Infinity. You only need to wash the underwater area with a suitable detergent such as Hempel's Pre-Clean and let it dry.

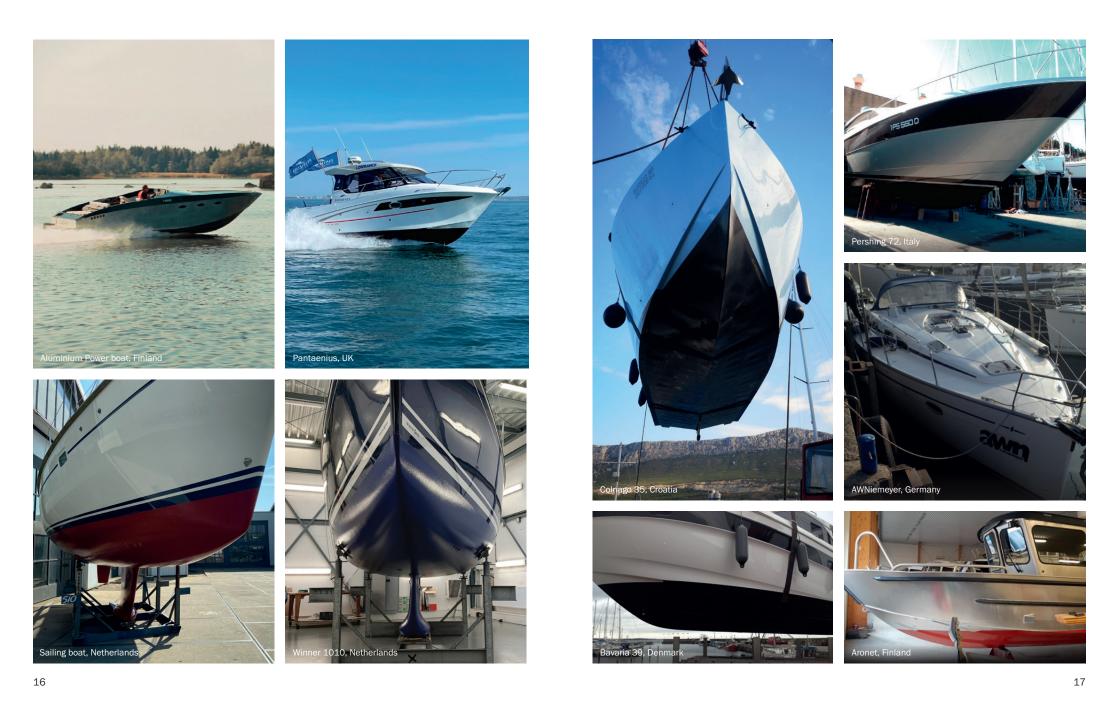
## For how many seasons can I apply Infinity before applying new coat of Silic One?

You can apply Infinity every season for as long as Silic One is in good conditions.

### Will Infinity build up layers?

There is no buildup of layers with Infinity.

## Painted with Hempel's Silic One



## **General Application Advice**

- Please read and carefully follow all the instructions before painting.
- New gelcoats need to be epoxy primed to a minimum of 300 micron dry film thickness.
- Remember to check the shelf life before use.
- Painting should be avoided if there is a risk of rain!
- The paint is sensitive to humidity, therefore only open the tin just before use.
- Hempel's Silic One Tiecoat and Silic One can be used up to 1 hour after opening the tin. A tin that has been opened cannot be stored for later use.
- It is strongly advised to apply the maximum film thickness without sagging for best performance and adhesion.
- For the initial application of Hempel's Silic One, two coats are required, but for next application one coat will be sufficient.
- Pour the paint into a paint tray and replace lid during application.
- The boat can be launched 24h-36h after last coat has been applied. Maximum launch time is 1 month.

## Tools for Silic One application



Short-haired or felt rollers are ideal for the application of Silic One. Long-haired rollers are better for application of Conversion Primer.



## Silic One system

Our most efficient antifouling solution

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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