

Hempel's Silic One

Our most efficient antifouling solution

hempelyacht.com









Fouling protection

Easy to apply & maintain



Fuel saving



Biocide- and copper-free



Works on propellers

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
- ✓ save the environment



Silic One is The ONE.

The premium antifouling.

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



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Silic One is 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.

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	Max	
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.

Hempel's Silic One



Conversion Primer





Silic One

4 easy steps:



1 Surface preparation



3 Silic One Tiecoat





2 Conversion Primer







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:







Light Primer

Silic One Tiecoat

Silic One



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

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Layers	Hempel's	10°C		20°C		30°C	
		Min	Мах	Min	Max	Min	Max
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Silic One for propellers

Surface preparation

- · Remove old antifouling first
- Clean with 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:								
Layers	Hempel's	10°C		20°C		30°C		
		Min	Max	Min	Max	Min	Max	
1.	Light Primer (thinned 20%)	8h	60d	4h	30d	3h	22d	
2.	Light Primer (thinned 5%)	4h	8h	2h	4h	1h	2h	
3.	Silic One Tiecoat	16h	48h	8h	48h	4h	24h	
4.	Silic One							
To be immersed after final coat		36h	1 month	24h	1 month	24h	1 month	

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. 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.

Can Silic One be applied at low temperatures?

Silic One can be applied down to 10°C.

How soon can I launch the boat after applying Silic One?

The boat can be launched from 24 hours to maximum 1 month after applying Silic One.

Can Silic One be applied on top of old antifouling?

Yes! With Conversion Primer you can apply on top of antifouling in good condition (good condition means = if you would normally apply another layer of antifouling – it is OK to apply Silic One system with Conversion Primer as well).

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.

Painted with Hempel's Silic One







Pantaenius, UK











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



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



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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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