

Hempaguard

The ultimate fuel saving
hull coating



**Paint
your way**



Explore the strongest Hull Performance offering

Hull Efficiency
Improvement



Data &
Monitoring



Advisory
Services



Performance
Guarantees



Hempel - a silicone pioneer

Five decades of silicone innovation



Hempaguard Silicone systems

Tailored flexibility for all vessel needs

Hempaguard keeps fouling at bay, even during extensive idle periods, changing trading patterns, or slow steaming, and ensures extremely low average hull roughness.

Hempaguard is a proven solution with over 4,000 applications since 2013 and DNV verified performance.

With Hempaguard, you will benefit from:

- An impressive average **fuel saving of 19 per cent** over the entire docking interval compared to average antifouling coatings
- Extremely low average **speed loss down to 1.4 per cent** – whatever your vessel's trading pattern.

Hempaguard **Ultima**

Our ultimate performance silicone coating system

SPEED LOSS	0.9%	FUEL SAVINGS	21%	IDLE DAYS	160
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TOPCOAT 2	Hempaguard XL 
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TOPCOAT 1	Hempaguard
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Hempaguard **Ultima** is the new, revolutionary and patented high-performance silicone system from Hempel, built on the trusted Hempaguard technology with more than 10 years of trusted performance and more than 4,000 applications.

Hempaguard **X8**

Perfect for slow steaming and tropical waters

SPEED LOSS	1.2%	FUEL SAVINGS	20%	IDLE DAYS	120
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TOPCOAT 2	Hempaguard X8
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TOPCOAT 1	Hempaguard X8
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Hempaguard X8 is an advanced fouling defence coating utilising advanced hydrogel silicone to enhance the antifouling barrier, extend fouling-free periods, and reduce hull roughness.

Hempaguard **NB**

Silicone coating solution for newbuild

SPEED LOSS	1.2%	FUEL SAVINGS	20%	IDLE DAYS	120
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TOPCOAT 2	Hempaguard NB
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TOPCOAT 1	Hempaguard NB/X7
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Hempaguard NB is an advanced fouling defence coating with improved weatherability designed for marine new construction.

Hempaguard **X7**

The benchmark silicone coating system

SPEED LOSS	1.2%	FUEL SAVINGS	20%	IDLE DAYS	120
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TOPCOAT 2	Hempaguard X7
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TOPCOAT 1	Hempaguard X7
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Since the launch in 2013, Hempaguard X7 has been the standard-setting silicone coating with more than 4,000 applications and DNV validated performance claims.

Hempablue

The biocide free silicone coating

SPEED LOSS	1.5%	FUEL SAVINGS	19%	IDLE DAYS	60
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TOPCOAT 2	Hempablue 
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TOPCOAT 1	Hempablue 
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Hempablue is the fourth generation fouling release based on silicone hydrogel. Hempablue is biocide free, two component and high-volume solids.

Hempaguard X7

The benchmark silicone coating system

Hempaguard keeps fouling at bay, even if your vessel undergoes extensive idle periods, changes trading patterns or steams slowly and provides extremely low average hull roughness. This is achieved thanks to the combination of silicone-hydrogel Actiguard technology with the controlled release of biocide.

As a result, you benefit from an impressive average fuel saving and extremely low average speed loss – whatever your vessel's trading pattern.

	SPEED LOSS	1.2%	FUEL SAVINGS	20%	IDLE DAYS	120
TOPCOAT 2	Hempaguard X7					
TOPCOAT 1	Hempaguard X7					

Hempaguard highlights:

- A well-tested and trusted solution for +10 years
- More than 4,000 applications
- Performance validated by DNV
- Documented fuel and emissions savings
- Static performance and no cleanings
- +80 per cent of customers re-apply Hempaguard

More than 4,000 applications

DNV validated performance

+10 years of trusted technology

Acknowledged by ABS

Hempaguard Ultima

Our ultimate silicone coating system


Hempaguard Ultima is the next generation high-performance silicone coating.

The unique combination of the trusted and well-documented performance of Hempaguard X7, combined with our revolutionary performance-enhancing silicone topcoat Hempaguard XL, is setting a new standard within high-performance silicone coatings.

How does Hempaguard XL enhance the system performance?

Hempaguard XL introduces a revolutionary dual-effect concept when combined with Hempaguard solutions:

- **Prolonged surface smoothness** Hempaguard XL is designed to maintain long term smoothness. This reduces the risk of fouling after long service periods, once the hydrogel and the biocide start to lose some effectiveness.
- **More efficient use of biocides** Hempaguard XL acts a modulator for the release of the biocide, stabilising the release rate and allowing a lower biocide amount per square meter to last longer.

	SPEED LOSS	0.9%	FUEL SAVINGS	21%	IDLE DAYS	160
TOPCOAT 2	Hempaguard XL					
TOPCOAT 1	Hempaguard					

Hempaguard NB

Silicone coating solution for newbuild

Hempaguard NB is an advanced fouling defence coating with improved weatherability designed for marine new construction.

With a topcoat optimised to withstand the exposure to weather while your vessel is under construction. As a result, you can now benefit from the silicone effect from sea trials.

SPEED LOSS	1.2%	FUEL SAVINGS	20%	IDLE DAYS	120
TOPCOAT 2	Hempaguard NB				
TOPCOAT 1	Hempaguard NB/X7				

Hempablue

The biocide free silicone coating

Introducing the next evolution in marine (Fouling Release) coatings: Hempablue. This fourth-generation fouling release system leverages advanced silicone hydrogel technology to offer an unparalleled combination of efficiency and environmental responsibility.

Free from biocides, Hempablue creates a slick, self-cleaning surface that effectively prevents fouling organisms from adhering, thereby reducing drag and enhancing fuel efficiency.

SPEED LOSS	1.5%	FUEL SAVINGS	19%	IDLE DAYS	60
TOPCOAT 2	Hempablue				
TOPCOAT 1	Hempablue				

Hempaguard X8

Perfect for slow steaming and tropical waters

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TOPCOAT 2	Hempaguard X8				
TOPCOAT 1	Hempaguard X8				



hempel.com/hempaguard

- Visit our website for:
- TCO and ROI analysis for your vessel type
 - Case stories and impressive real life performance
 - Technical articles
 - The opportunity to book a ship-specific assessment for your vessel

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

Across the globe, Hempel's paints and coatings can be found in almost every country of the world. They protect and beautify buildings, infrastructure and other assets, and play an essential role in our customers' businesses. They help minimise maintenance costs, improve aesthetics and increase energy efficiency.

At Hempel, our purpose is to shape a brighter future with sustainable coating solutions. We firmly believe that we will succeed as a business only if we place sustainability at our heart. Not only is it the right thing to do, it will strengthen our competitive position, make ourselves more resilient and reduce our risk.

Hempel was founded in Copenhagen, Denmark in 1915. It is majority 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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