SeaForce Shield

Product description

This is a one component high solids hydrolysing antifouling coating based on ion exchange technology. It provides cost efficient fouling protection. This is achieved by self polishing characteristics reducing hull deterioration. To be used as finish coat in immersed environments only. Suitable on approved primers and tie coats on aluminium and carbon steel substrates. It can be applied at sub zero surface temperatures.

Typical use

Marine:
Recommended for under water hull in drydocking. Designed for vessels trading at a range of speeds and activities. This product can be used for 36 months on the vertical sides of a vessel and 60 months on the flatbottom and boottop.

Typical trade

World wide, recommended for deep sea trade.

Approvals and certificates

Compliant with IMO Antifouling System Convention AFS/CONF/26 + IMO MEPC.331(76).

Additional certificates and approvals may be available on request.

Colours

light red, dark red

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	63 ± 2 %
Flash point	ISO 3679 Method 1	27 °C
Density	calculated	1.6 kg/l

Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	369 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	369 g/l
EU	European Paint Directive 2004/42/CE	Calculated	369 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	369 g/l
Korea	Korea Clean Air Conservation Act	KS M ISO 11890-1	358 g/l
China	Mandatory national standard of China	GB 30981.2-2025	358 g/l

This Technical Data Sheet supersedes those previously issued.
The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

The provided data is typical for factory produced products, subject to slight variation depending on colour.

Film thickness per coat

Typical recommended specification range

Dry film thickness	75	-	175	µm
Wet film thickness	120	-	275	µm
Theoretical spreading rate	8.4	-	3.6	m²/l

Surface preparation

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Coated surfaces	New tie coat or new antifouling: Remove any contamination that could interfere with the intercoat adhesion. Exceeding maximum recoat intervals will require cleaning/abrading and/or application of additional coats, depending on condition Aged antifouling with leached layer: Removal by thorough fresh water washing at minimum nozzle pressure 200 bar.	New tie coat or new antifouling: Remove any contamination that could interfere with the intercoat adhesion. Exceeding maximum recoat intervals will require cleaning/abrading and/or application of additional coats, depending on condition Aged antifouling with leached layer: Removal by thorough fresh water washing at minimum nozzle pressure 340 bar.

Application

Application methods

The product can be applied by

Spray:	Use airless spray.
Brush:	May be used. Care must be taken to achieve the specified dry film thickness.
Roller:	May be used. Care must be taken to achieve the specified dry film thickness.

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Product mixing

Single pack

Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 7 / Jotun Thinner No. 10

Guiding data for airless spray

Nozzle tip (inch/1000): 21-31

Pressure at nozzle (minimum): 150 bar/2100 psi

Drying and Curing time

Substrate temperature	-10 °C	0 °C	10 °C	23 °C	40 °C
Surface (touch) dry	5 h	2 h	45 min	30 min	30 min
Dry to over coat, minimum	48 h	36 h	9 h	7 h	6 h
Dried/cured for immersion	48 h	36 h	12 h	10 h	8 h

For maximum overcoating intervals, refer to the Application Guide (AG) for this product.

When three or more antifouling coats are applied in rapid succession it is recommended to double the time for immersion.

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product.

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness.

Dry to over coat, minimum: The recommended shortest time before the next coat can be applied.

Dried/cured for immersion: Minimum time before the coating can be permanently immersed in sea water.

Recommended type of primer

Anticorrosive primer system suitable for purpose. Recommended tie coat for the subsequent antifouling coat is:
Safeguard Universal ES
or
Safeguard Plus

Packaging (typical)

	Volume (litres)	Size of containers (litres)

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SeaForce Shield	5 / 20	5 / 20

The volume stated is for factory made colours. Note that local variants in pack size and filled volumes can vary due to local regulations.

Storage

The product must be stored in accordance with national regulations. Keep the containers in a dry, shaded, cool, well-ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Shelf life at 23 °C

SeaForce Shield	18 month(s)

In some markets commercial shelf life can be dictated shorter by local legislation. The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

Caution

This product is for professional use only. The applicator and operator shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Jotun's technical documentation. Applicators and operators should use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to the responsible Jotun representative for approval before commencing the work.

Health and safety

Please observe the precautionary notices displayed in the container. Use under well-ventilated conditions. Do not inhale spray mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and sought medical attention immediately.

Colour variation

When applicable, products primarily meant for use as primers or antifoulings may have slight colour variations from batch to batch. Such products and epoxy-based products used as a finish coat may chalk when exposed to sunlight and weathering.

Colour and gloss retention on topcoats/finish coats may vary depending on type of colour, exposure environment such as temperature, UV intensity etc., application quality and generic type of paint. Contact your local Jotun office for further information.

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the data given without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

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