

## Sea Queen Extreme Antifouling

### Product Description

Innovative antifouling coating, tin & copper free. It can be applied to vessels with speed up to 40kt. It also responds (fouling free) to vessels' needs that remain idle, move at a very low or very high speed for extended periods. Ideal for sea environments with a high degree of fouling from microorganisms (hard fouling: barnacles). It conforms to the strictest National, Community and International Regulations of the International Maritime Organization (IMO). Ideal antifouling formulation for application on aluminum hulls or wherever copper formulations prove incompatible to substrate.

Sea**Queen Extreme** is an antifouling coating based on self-polishing mechanism. The final coat depicts very low roughness (Roughness 25 to 40 $\mu$ m) due to the absence of cuprous oxide and the paint formulation during production. The low roughness of the final coating does not only reduce the friction of water but also allows even leachable release (leaching rate) and therefore better antifouling protection even in long idle periods. In the end, the Sea**Queen Extreme** composition also contributes to energy saving and better antifouling action.

### Recommended Use

Recommended as a high-performance antifouling coating for ocean going vessels and/or when vessel's idle periods extend more than one month (30 days). Ideal for both stationary and slow-/fast-moving vessels. Provides long-term antifouling protection for non-moving structures in the marine environment, like floating facilities and platforms. Ideal for coastal or closed-sea antifouling protection, where copper (I) biocides pose a threat to environmental diversity

### Technical Specifications

<b>Type</b>	▶	Antifouling Paint based on Copolymer Resin
<b>Color</b>	▶	Red Brown / Red / Blue / Black
<b>Components</b>	▶	Single Component
<b>Thinner/Solvent</b>	▶	NanoPhos Thinner B
<b>VOC (Volatile Organic Compounds)</b>	▶	500 gr/L <sup>1</sup>
<b>Solids (% vol)</b>	▶	60 $\pm$ 3
<b>Touch Dry Time</b>	▶	30min @20°C (*)
<b>Dry Through Time</b>	▶	51h @20°C (*)
<b>Min. Recoat Interval</b>	▶	4h @20°C (*)
<b>Full Curing Time</b>	▶	24d @20°C (*)
<b>Induction Time</b>	▶	15min @20°C (*)
<b>Water Resistance</b>	▶	Excellent
<b>Abrasion Resistance</b>	▶	Very Good

(\*) Drying times differentiate in minimum or maximum values. Maintain recommended values during application. Coverage rate is Theoretical and does not include any losses

#### NanoPhos S.A.

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### Surface Preparation

**Compatible Coats:** All surfaces should be clean, dry and free from oil, grease and other foreign matters or contamination. Preparation according to ISO 8502-3:1992 Test for the assessment of surface cleanliness

### Application Instructions

#### Application

Conventional Spraying ▶	Paint pressure pot with power agitator, double air regulators, moisture trap, 1/2" ID fluid hose, 5/16" ID air hose, DeVilbiss 510 gun, "E" tip and needle, 74 or 78 air cap.
Airless Spray ▶	Minimum pump: 30:1, Nozzle: 19-22
Brush ▶	Recommended application method only for stripe coating or small narrow areas.

This product is intended for professional use only. Applicators and operators must be trained, experienced and have the ability and equipment to mix / mix and apply coatings correctly and in accordance with NanoPhos technical documentation. Applicators and operators must use appropriate personal protective equipment when using this product. This guideline is given based on current knowledge of the product. To be used in well-ventilated conditions.

### Coverage

#### FILM THICKNESS PER COAT

	Minimum	Maximum	Recommended
Dry Film Thickness (µm):	75	150	100
Wet Film Thickness (µm):	125	250	167
Spreading Rate (m <sup>2</sup> /L):	8	4	6

Substrate temperature should be minimum 5°C and at least 3°C above air dew point. Good ventilation is required to ensure proper drying.

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### Additional Information

#### Paint System

Please contact NanoPhos Marine for more information.

### Storage

Store in the original closed packaging, in a well-ventilated area, at a temperature of 5°C to 35°C, away from sunlight and frost.

### Health and Safety

Read the product label before use. The Safety Data Sheet is available on [www.NanoPhos.com](http://www.NanoPhos.com) or on request by contacting NanoPhos by email: [info@NanoPhos.com](mailto:info@NanoPhos.com) or by phone: 2292069312.

### Available Packaging

Metal canisters: 1L, 2.5L, 5L & 20L

- **Notes & Precautions:** Adverse weather conditions during or after the product application may affect the properties of the coating. Storage of closed containers, in controlled dry and enclosed space, away from sources of ignition and temperatures from 5oC to 35oC, for up to 18 months. The Technical Data should be read in conjunction with the Safety Data Sheets. The current edition of this technical data sheet automatically cancels any previous one concerning the same product. For more information, please contact NanoPhos: [info@NanoPhos.com](mailto:info@NanoPhos.com)
- The technical data sheets and the recommendations for using NanoPhos products are based on our scientific knowledge, laboratory studies, and long-term experience. Therefore, the information provided must be considered indicative and subject to constant review in relation to the circumstances and each practical application. Furthermore, the product's suitability should be examined in each case for each specific use. The end-user bears complete & exclusive responsibility for any side effects that may arise from the incorrect use of the product.

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