

ELPLUS 855

Marine Energy-Saving Anti-Fouling Topcoat

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1. Product Overview

ELPLUS 855 is a premium, high-performance energy-saving marine anti-fouling topcoat. It is specially formulated to combat the attachment and growth of marine fouling organisms, such as barnacles, weeds, and algae, on ship bottoms and marine steel structures. By maintaining a hydrodynamically smooth hull surface over extended periods, ELPLUS 855 significantly reduces navigational frictional resistance, thereby delivering outstanding energy savings, carbon emission reductions, and heavy-duty anti-corrosion benefits.

2. Core Features

- **Extended Static Anti-Fouling Performance:** Engineered with advanced controlled-release technology, it provides robust and long-lasting protection against hard and soft marine fouling for up to 36 to 60 months, even during prolonged stationary periods.
- **Hydrodynamic Drag Reduction & Fuel Savings:** Continuously maintains an ultra-smooth hull profile. This minimizes water friction and drag, allowing vessels to operate at optimal speeds while substantially reducing fuel consumption and operational costs.
- **TBT-Free & Environmentally Compliant:** Completely free of tributyltin (TBT) and other harmful organotin compounds. It fully complies with the International Maritime Organization (IMO) Anti-Fouling Systems (AFS) Convention and modern global environmental maritime regulations.

3. Applications

- Designed as the ultimate topcoat for the underwater hulls, flat bottoms, and boot-tops of ocean-going vessels, commercial ships, and offshore platforms.
- Ideal for vessels seeking to optimize fuel efficiency and reduce greenhouse gas emissions.
- Suitable for both newbuilding projects and drydock maintenance & repair (M&R) operations.

4. Typical Technical Properties

Properties	Typical Data	Test Method
Appearance	Red Brown / Dark Red / Custom	Visual
Coating Type	Tin-Free Anti-Fouling Topcoat	-
Solid Content	≥ 60%	ISO 3233
Recommended DFT	100 μm ~ 150 μm	-
TBT (Organotin) Content	0% (Complies with IMO AFS)	-
Anti-Fouling Lifespan	36 - 60 Months	-
Drying Time (Hard Dry)	12 hours (25°C)	ISO 9117

5. Application Instructions

- Surface Preparation:** Must be applied over an approved, clean, and dry tiecoat (e.g., ELPLUS 854) or anti-corrosive primer. Ensure the underlying layer is within its specified overcoating time limit. If the previous coating has exceeded the overcoating window, high-pressure freshwater washing and surface roughening are required.
- Application Method:**

Airless Spraying (Highly Recommended): Ensures a uniform, thick, and smooth film critical for minimizing hydrodynamic drag.

Brushing / Roller: Recommended only for stripe coating, touch-ups, or repairing small areas.
- Environmental Conditions:** Apply only when the substrate temperature is at least 3°C above the dew point.

6. Packaging & Storage

- Packaging:** Standard marine packaging (e.g., 20 Liters / drum).
- Storage Conditions:** Store in a dry, well-ventilated warehouse away from heat sources and direct sunlight.
- Shelf Life:** 12 months from the date of manufacture under proper, unopened storage conditions.

7. Health & Safety

- Application must be carried out in a well-ventilated environment.
- Operators must wear appropriate personal protective equipment (PPE), including safety goggles, respirators, and protective clothing.
- For complete safety information, please refer to the product's Safety Data Sheet (SDS).

Technical Support & Contact

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