



ALTURA 619 EXTRA

70E.619

Description

Premium Hard anti-fouling with high copper content with controlled biocide and synergic co-biocide release. The reduced leach layer effect avoids coating build up for effective protection of the underwater hull from the settling of marine fouling, offers protection for up to 36 months. Specifically designed for the requirements of the superyacht market.

Suitable for steel, composite and wooden hulls. Suitable for aluminium hulls that have been suitably primed with min. 300 microns of epoxy primer protection.

Use

Indicated for both new buildings and maintenance of underwater hull and boot top on vessels operating at a wide range of speed and activity.

The product is designed for service periods up to 36 months depending on the applied dry film thickness (as per designated Technical Specification) with limited stationary periods as a part of a complete coating system.

Certifications

It complies with the IMO (AFS/CONF/26). Certified by Lloyds' and RINA as TBT FREE and CYBUTRYNE FREE product.

Informations

Finish	Matt	
Colours*	.201 Black - .118 Dark Blue - .001 White - .165 Iron Grey	
Pack	5 - 15 l	
Solids by Volume	50 ± 2% (colours) - 46 ± 2 % (white)	ISO 3233-2
Specific Gravity	1,90 ÷ 2,00 g/cm ³ (colours) - 1,60 ÷ 1,70 g/cm ³ (white)	ISO 2811-1
Flash Point	38 °C	ISO 3679
VOC	373 g/l	Calculated
Shelf Life	24 months	

* The colour of the antifouling paint after diving may be slightly different. Small shade differences may occur between different production batches: in case, mix them before the application.

Application

SUBSTRATES:

Correctly primed and tie coat on steel, aluminium, composite and wood or existing and compatible anti-fouling.

SURFACE PREPARATION:

Cleaning: remove salts, loose matter, detergents, contaminants, leached layer and marine growth by high pressure freshwater cleaning. The surface must be clean, dry and free of contaminants before application of recommended products.

New building:

According to Technical Specification.

Maintenance:

Existing anti-fouling in good condition: check antifouling compatibility with your Boero representative. If compatible, directly apply it following specified overcoating times. If the existing antifouling is not compatible or unknown, apply a tie coat before antifouling application.

Existing anti-fouling in bad condition: remove the degraded antifouling by wet sanding. Remove the dust.

For further information please contact your local Boero office or representative.



ALTURA 619 EXTRA

70E.619

How to Apply

Standard		Brush Roller
Conventional Spray		Pressure 2,5 bar Nozzle 1,6 – 1.8 mm
Airless		Pressure 150 bar Nozzle tip 0,017 – 0,021"

Film Thickness per Coat

DFT	Recommended: 60 µm Standard application range: 50 - 60 µm
WFT	Recommended: 120 µm (colours) - 130 µm (white) Standard application range: 100 - 120 µm (colours) - 110 - 130 µm (white)

Additional Application Information

Theoretical spreading rate	Application range at the recommended thickness: 8,3 m²/l (colour) - 7,7 m²/l (white)
Number of Coat Recommended	2 coats of 60 microns for a 12 month protection. Apply an extra coat in areas subjected to higher consumption/friction (boot top, rudders, thruster, etc.). For further DD interval please contact your local office or representative.
Thinner	703

Compatibility

Previous Coat

Approved primers and/or tie coats:

BOEROGUARD DUO, DEFENDER: two-component primer suitable for all substrates or as a tie-coat on old adherent antifouling, in good condition and present in traces.

MISTRAL FONDO: one-component primer on wood and composites, or as tie coat/sealer for old anti-fouling paints or hard matrix type anti-fouling.

ANCHORGUARD: one-component adhesion primer on composite materials

Anti-fouling: compatible anti-fouling

Subsequent Coat

N.A.

Drying Time

	10 °C		15 °C		20 °C		30 °C	
	Min	Max	Min	Max	Min	Max	Min	Max
Overcoating interval	18 h	None	12 h	None	6 h	None	4 h	None
Launching	24 h	6 months	18 h	3 months	12 h	3 months	8 h	2 months

N.B. The drying times and the overcoating intervals increase with higher thickness of the applied paint film. Always check the existing paint film is dry before applying any further product coats.



ALTURA 619 EXTRA

70E.619

After the application of the last coat, the maximum launching period of the antifouling is one month; with top quality copper oxide-based products and with the agreement with Boero technical staff, the launching time may be extended up to 9 months, providing that the hull is protected from moisture, rain or atmospheric agents with plastic or similar material.

If extended period out of the water, before launch, rinse the surface with freshwater and agitate the surface lightly with a light scotchbrite pad.

Conditions during application

During application and curing:

Ambient temperature: minimum 10°C, maximum 35°C.

Minimum substrate temperature 10 °C (if during the curing the temperature drops below 10 °C, overcoating will take additional time).

Avoid the formation of condensation, the surface temperature should be at least 3 °C above dew point.

Maximum relative humidity 85%.

Painting area should be well ventilated, during application and drying/curing.

Storage

It is recommended to avoid exposure to air and extreme temperatures. To maximize the shelf life in the can, check that the container is closed during the storage and the temperature is between 5 °C and 35 °C.

Avoid exposure to direct sunlight.

Safety Rules

Comply with the provisions set by the local health and safety at work regulations. Avoid contact with the skin, operate in well-ventilated places and, if in closed areas, use vacuum cleaners, fans and air conveyors. During the application use appropriate PPE - Personal Protections Equipment (masks, gloves, glasses, etc.). Before using, read sections 7-8 of the SDS

INSTRUCTIONS FOR THE DISPOSAL OF THE BIOCIDAL PRODUCTS AND PACKAGING

Empty packaging containing biocidal products: disposal of empty packaging according to the requirements of the waste disposal law, for example by taking them to the recycling centre. Packages containing the unused biocidal product: Dispose of the product not used in accordance with the law of disposal of such waste, for example by taking it to a recycling centre, recycling of packaging is prohibited in this case. Do not empty into drains or watercourses.

INSTRUCTIONS FOR THE SAFETY SECURITY OF THE BIOCIDAL PRODUCTS AND PACKAGING

Empty containers and containers still containing the biocidal product: Packaging must be disposed of as hazardous waste under the full responsibility of the holder of such waste. Do not empty into drains or watercourses.

Disclaimer

The values indicated in the present technical sheet can have slight variations from one batch to another. The applied product must not come in contact with water, chemicals or subjected to mechanical stress before the curing is complete. The wet film thickness refers to the undiluted product. In case of dilution, this value increases. The above information is the result of accurate laboratory tests and practical experience, however, since the product is predominantly used outside the manufacturer's control, Boero Bartolomeo S.p.A. can only guarantee their quality. The information contained in this sheet may be subject to revision by the Company. For clarification, updates or further information, it is recommended to contact Boero Bartolomeo S.p.A. directly. The present datasheet annuls and replaces every other precedent to this one.