# GIRAGLIA 633 EXTRA 70E.633



# **Description**

Premium self-polishing anti-fouling with controlled biocide and co-biocide release for excellent performance. This anti-fouling protects the underwater hull from the settling of marine fouling, offers protection for up to 36 months. 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.

## **Certification**

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 Black118 Dark Blue111 Light Blue*171 Red001 White                |                |  |  |  |  |
| Colours          | *only 5 liters  | *only 5 liters |  |  |  |  |
| Pack             | 5 - 15 l  | 5 - 15 l       |  |  |  |  |
| Solids by Volume | 50 ± 2% (colours) - 46 ± 2 % (white)                                  | ISO 3233-2     |  |  |  |  |
| Specific Gravity | 1,85 ÷ 1,95 g/cm <sup>3</sup> - 1,65 ÷ 1,75 g/cm <sup>3</sup> (white) | ISO 2811-1     |  |  |  |  |
| Flash Point      | 31 °C   | ISO 3679       |  |  |  |  |
| VOC              | 383 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.

#### <u>Maintenance:</u>

**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.

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## How to Apply

| Standard           |             | Brush<br>Roller (typical 40-50 µm DFT per application) |
|--------------------|-------------|--|
| Conventional Spray | <b>1</b>    | Pressure 2,5 bar<br>Nozzle 1,6 – 1.8 mm                |
| Airless            | <b>∏</b> ⇔́ | Pressure 150 bar<br>Nozzle tip 17 – 21 mm              |

### Film Thickness per Coat

| DFT | Recommended: 60 μm<br>Standard application range: 50 - 60 μm    |
|-----|---|
| WFT | Recommended: 120 µm<br>Standard application range: 100 - 120 µm |

### Additional Application Information

| Theoretical spreading rate | Application range at the recommended thickness:<br>8,3 m²/l |  |  |  |
|----------------------------|---|--|--|--|
| Number of Coat Reccomended | 3 coats of 70 microns for a 24 months protection.           |  |  |  |
| Thinner                    | 703   |  |  |  |

## <u>Compatibility</u>

#### Previous Coat

#### Approved primers and/or tie coats:

<u>DEFENDER</u>: 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: 1 component primer on wood and composites, or as tie coat/sealer for old anti-fouling paints or hard matrix type anti-foulings.

ANCHORGUARD as 1 component adhesion primer on composite materials

Anti-foulings: compatible anti-foulings

Prooceding 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 film. Always check that the existing painting film is perfectly dry before applying a further product coat.

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BOERO YachtCoatings

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.