



YachtCoatings
ORION EXTRA
TECHNICAL DATA SHEET

Product description

PROFESSIONAL AND DIY USAGE

Hard matrix antifouling formulated to be used in extreme conditions such as the protection of propellers, axes, stern drives, flaps etc. It is free from copper oxide and organostannic compounds. Therefore, it can be used on any type of metal. It can boast an excellent adherence and a good antifouling power. This product must be used with Orion Primer to guarantee a perfect performance. Its new formula has improved its resistance to cathodic over-exposure. It complies with the MO (AFS/CONF/26) antifouling requirements and it contains active substances according to **BPR (regulation (UE) n. 528/2012)**.

Product information

Aspect	Matt	
Colour	Black .201, Grey .065, White .001 <i>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.</i>	
Solids (by volume)	ASTM D2369	45 ± 2 %
Specific gravity	UNI EN ISO 2811-1	1,55 ÷ 1,65 g/cm ³
Flash point	UNI EN ISO 13736	+ 26° C
Average shelf life		3 years
VOC (calculated average content)	ISO 11890-2/2006	452 g/l
Packaging	0,25 Lt	



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Application and use

SURFACE PREPARATION




Stern drives in aluminium: thoroughly clean the surface and degrease if necessary; sandpaper with medium grain paper, dust off and apply a coat of ORION PRIMER. After 6-8 hours, apply a first coat with a low thickness of ORION EXTRA.

Bronze propellers and steel axes: thoroughly clean and degrease the surface, if required. Sandpaper with coarse-grain paper, in order to roughen the surface to be treated. Wash with thinner in order to remove any trace of dirt or dust. Then, apply a coat of ORION PRIMER. After 6-8 hours, apply a low thickness coat of ORION EXTRA. If necessary, dilute at 5-10% with Thinner 693.

Application methods

Application methods	 
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
Professional only

Application methods		Conventional Pressure 3,5 bar Nozzle 1,7 – 1,9 mm
	 	



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Application data

Thinner		693
Dry film thickness per coat	Application standard range	50 - 70 µm
	Recommended	60 µm
Wet film thickness per coat	Application standard range	110 - 150 µm
	Recommended	130 µm
Theoretical coverage at the recommended thickness	Application range at the recommended thickness	7,5 m ² /l
N° of coats	2 coats for seasonal protection Apply an additional coat in the areas of greatest consumption/friction	
Recommended primers	Orion Primer	

Drying time

Temperature °C	10		15		20		30	
	Min	Max	Min	Max	Min	Max	Min	Max
Coverage (60 µm)	16 h	NL	12 h	NL	6 h	NL	6 h	NL
Launching	24 h	30 days	24 h	30 days	24 h	30 days	12 h	30 days

N.B. The drying times and the overcoating intervals increase with higher thickness of the applied film.
 Always check the existing painting film is perfectly dry before applying a further product coat.



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CONDITIONS DURING APPLICATION

In order to avoid the formation of condensation, the temperature of the surface should be at least 3° C. above dew point. During the application and curing, the min. ambient temperature must not be lower than 10° C or higher than 30° C, substrate temperature must not be lower than 5° C, since curing is remarkably reduced at lower temperatures.

Application is not advisable when relative humidity exceeds 80%. The term-hygometric survey should be carried out near the surface to be coated. Make sure there is enough ventilation when application takes place in closed environments.

Storage

It is recommended to avoid exposure to air and extreme temperatures. To maximise the shelf life in the can, it is worth checking that the container is well closed during the storage and that temperature is between 5° C and 35° C. Avoid exposure to direct sunlight.

Safety rules

Observe the provisions of DPR 303 and 547. Avoid contact with skin, for example. Operate in well-ventilated places and if in closed areas, use vacuum cleaners, fans and air conveyors. During the application, use appropriate protections (masks, gloves, glasses, etc). Before using, read section 7-8 of the SDS.

INSTRUCTIONS FOR THE DISPOSAL OF BIOCIDAL PRODUCTS AND PACKAGING

Empty packaging that contained biocidal products: Dispose of empty packaging according to the requirements of waste disposal law, for example by taking them to the recycling centre.

Packages containing the unused biocidal products: Disposal of the unused product 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 water courses.

INSTRUCTIONS FOR THE SAFE DISPOSAL OF BIOCIDAL PRODUCTS AND PACKAGING.

Empty packaging containing biocidal products: Packaging must be disposed of as hazardous waste under the full responsibility of the holder of such waste. Do not empty into drains or water courses.



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Notes

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 refer to the non-diluted product. With dilution, this value will rise. The above information is the result of accurate laboratory tests and practical experiences; however, since the product is predominantly used outside the manufacturer's control, Boero Bartolomeo S.p.A. Can only guarantee its quality. The information contained in this sheet may be subject to revision by the Company. For clarification, updates or for further information, it is recommended to contact Boero Bartolomeo S.p.A directly. The present datasheet annuls and replaces every other to this one.