



YachtCoatings

CHALLENGER PRO CLEAR

TECHNICAL DATA SHEET

Product description

Challenger Pro Clear is a two-component acrylic clear varnish conceived to meet duration requirements in all operational conditions of watercrafts. Challenger Pro Clear protects the surface from ultraviolet rays, weather, and provides an excellent aesthetical effect. Its excellent properties - brightness, expansion and lack of yellowing - together with its ease of application make possible to use it on any type of watercraft, including the large surfaces found in the Superyacht segment. It is used on pastel, metal or pearl shaded "dual-layer" matte base coats or where a transparent finish with excellent properties is required. Its extremely clear appearance makes any touch-up work easier, minimizing the lens effect on shaded areas.

Product information

Product code	690.200		
Finish	Glossy		
Colour	Colourless .000		
Solids (by volume)	ASTM D2369	50 ± 2%	
Specific gravity	UNI EN ISO 2811-1	1,0 g/cm ³	
Flash poiny	UNI EN ISO 13736	23 – 55 °C	
VOC (calculated average content)	ISO 11890-2/2006	352 g/l	
Packaging	5 Lt		

Application and use

SURFACE PREPARATION

Apply this topcoat on compatible surfaces, with a suitable and uniform colour shade. It is advisable to apply Challenger Pro Clear on surfaces treated with the products mentioned in the "Recommended products" section. Surfaces must be clean and properly prepared. Before painting, make sure that all surfaces are perfectly dry, clean and without any traces of contaminants.



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Application data

Mixing ratio by volume		2:1
Mixing ratio by weight Base (comp. A) 690.200 Hardener (comp. B) 690.999		66 w/w 33 w/w
Pot-life NB: do not use this product when Pot-life time is exceeded		2 hrs at 20 °C
Thinner/Cleaning tools NB: the indicated dilution % is considered on the catalyzed product		15 – 25 °C Thinner PRO 698 (20 – 35% max) 22 – 35 °C Thinner PRO slow 697 (20 – 35% max)
Spray viscosity		14" – 16" DIN 4 at 20° C
Application methods		Conventional Pressure 3,5 bar Nozzle 1,3 mm N ² /3 wet on wet coverage with intermediate "flash off" = 50 µm dry
		Air mixed Pressure 3,5 bar Nozzle 0,7 mm – 1,1 mm N ² /3 wet on wet coverage with intermediate "flash off" = 50 µm dry
Dry film thickness per coat	Standard application range	40 – 60 µm
	Recommended	50 µm
Wet film thickness per coat	Standard application range	80 – 120 µm
	Recommended	100 µm
Theoretical coverage	50 µm	10 m ² /l
Practical coverage (loss value 30%)	50 µm	7 m ² /l
Recommended products	Challenger PRO SE – Challenger PRO 2L – Challenger PRO	



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Note This product is provided in two tins to be mixed entirely and carefully before use. In case it is required, dilution has to be performed after the mixing of the two components. The physical data of two-component products refer to components that have been already mixed.

Drying time

Temperature °C		10		15		20		30	
		Min	Max	Min	Max	Min	Max	Min	Max
Wet on wet coverage				60'	180'	60'	120'	40'	90'
Sanding				78 h		72 h		48 h	
Polishing						72 h		72 h	
Full curing				7 days		7 days		7 days	

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.*

CONDITIONS DURING APPLICATION

In order to avoid the formation of condensation, the surface temperature should be at least 3 °C above dew point. During application and curing, the min. ambient temperature must not be lower than 15°C or higher than 30 °C; substrate temperature must not be lower than 10 °C, since curing is remarkably reduced at lower temperatures.

Application is recommended when the relative humidity is within the range of 30 - 80%. The term-hygrometric survey should be carried out near the surface to be coated. Make sure there is enough ventilation when the application takes place in closed areas.



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Storage

It is recommended to avoid exposure to air and extreme temperatures. To maximize the shelf life in the can, it is worth checking that the container is well closed during the storage and the temperature is between 10 °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, 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 sections 7-8 of the SDS.

INSTRUCTIONS FOR THE DISPOSAL OF PRODUCTS AND PACKAGING

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

Packages containing the unused products: Dispose of the unused product in accordance with the law of disposal of such waste, for example by taking it to a recycling center, recycling of packaging is prohibited in this case. Do not empty into drains or watercourses. Product packaging must be kept indoor, and the temperature in the storage place must be between 10 °C and 35 °C. Do not expose to sunlight.

Notes

The values indicated in the present technical sheet can have slight variations from one batch to another. All data refer to the mixed product. The applied product must not come in contact with water, chemicals or subjected to mechanical stress before the curing is complete. The wet film thicknesses refer to the undiluted product. With dilution, this value will rise. 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 its 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.



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Recommendations

This material has been tested and meets all batch quality requirements. For any touch-up or polishing work, the procedures indicated by Boero Bartolomeo S.p.A must be followed. Boero Bartolomeo S.p.A accepts no liability for any issues concerning any difference in shade.