

UNDERCOAT EP 215 HB+

Technical sheet no. 20

Editing September 2022

TYPE OF PRODUCT :	ANTI-CORROSION EPOXY COATING OR PRIMER
PROPERTIES :	UNDERCOAT EP 215 HB+ is an epoxy polyamino-amide anti-corrosion system applicable in high thicknesses. It combines the chemical resistance performance of epoxy and the tolerance of polyamide coatings. UNDERCOAT EP 215 HB+ provides, as an intermediate undercoat between coatings and lacquers, an excellent chemical barrier and good stabilization of the bases.
Information Products	UNDERCOAT EP 215 HB+ guarantees excellent chemical resistance of primers on the underside of ships. Excellent resistance:
	 To dry heat (100°C continuously).
	 To immersion in fresh water and sea water.
	• to most solvents and greases.
	 Excellent coating performance and filling power.
	Very easy to sand.
	 Excellent quality and smoothness of the film after sanding.
	• Possible application of a wet film up to $250\mu m$ wet on wet, in 2 layers.
COMPONENTS:	
Hardeners	Undercoat EP 215 HB+ Fast Epoxy Impact Accelerator (from 3% to 6% of the prepared volume). EP Thinners No. 17
	DILUTIONS: •BRUSHES AND ROLLS from 3% to 10% • PNEUMATIC GUN from 5% to 20% • AIRLESS from 3% to 5%
SPECIFICATIONS :	MAP YACHTING Paint Systems SPEC
Qualifications	

For the latest missing updates, please check with us at sales@map-yachting.com



Surface Preparation



All surfaces to be covered must be free of dirt, pollution due to grease, water vapour, (refer to the dew point table) dust or mould. In order to ensure a perfect finish, and to obtain an excellent quality of surface tension, the interfaces or undercoats must be perfectly smooth, and free of drips or orange peel and sanded with very high quality abrasives to the FEPA standard.

UNDERCOAT EP 215 HB+ can receive PU225HB or PU228HB primers, previously sanded and cleaned.

UNDERCOAT EP 215 HB+ can also be used on primers, EP 211, IM409, MIXFILL 27-10 fillers, GREENFILL80, MIXFILL 100, SPRAYABLE FILLER 500, AEROFILLER 525.01, EP 215 HB+, PU225- PU228, EPU 221, and finishes GL 55, PU 77, PU 99, F16 and TOPCOAT PU320-PU380.

As a finish for underwater work before PROTIS, ISIS or GYPTIS antifouling.

Manual						
	Mixing ratio	Volume (ml)	5	Base /	1	Hardener
		Weight (gr)	90	(gr) Base /	10	(gr) Hardener

Allow products to acclimate to ambient site temperature before use. Base should be mixed thoroughly for at least 5 minutes using a clean disperser mounted on an explosion-proof stirrer. Then add the part of hardener by pouring it slowly and continuing to mix until a liquid with a smooth and homogeneous unctuous appearance is obtained. Since the two components are of different viscosity, the edges of the mixing container should be carefully scraped with a spatula. Mixing containers should have flat bottoms and perfectly smooth edges

	Duration dying	15 minutes at 20°C
∏ s	Viscosity initial of application (at 23ºC)	48s to 1min AFNOR Cup n°4
and the second s	Remark	



	Shelf life of the mixture at 20°C	6 hours
and the second s	Remark	Dry film weight for a thickness of 100 μ m: 276g/m ²
1 μm	Dry film thickness	100 – 250µm

1

Applications & Recommendations

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Conditions	Hardeners :	Undercoat 215HB+ with Fast Epoxy Impact +	Undercoat 215HB+
Ő		Place:	15°C– 17°C	20 - 25°C
		Hygrometry :	30 - 65%	40 - 70%

```
000
```

The quality of application of all coatings will be influenced by the spray equipment chosen and by the temperature, humidity and airflow of the paint application area. When first applying the product, it is recommended that test panels be prepared to identify the best equipment settings to use to optimize the performance and appearance of the coating. UNDERCOAT EP 215 HB+ can be applied in conditions outside the limits indicated. Care should be taken to ensure a satisfactory result. Please contact your MAP YACHTING Paint Systems technician to determine proper application techniques and choice of thinners when environmental conditions are outside the recommended range.

Remark

Note

The quality of the coating may be degraded by humidity during its crosslinking phase.





### Materiel

Pressure pot Pistol : AZ1/ IWATA WS200SP / WS200FT / W200G2P Nozzle + Needle: 1.4mm to 1.8mm Paint flow: 170 - 280 ml/min Air cap: G2P / WS-200SP-01 / WS-200FT-01 / WS-200FT-02 Gun pressure: 2.5 – 3.0 Bars Pressure Product: 1 Bar Gravity gun Pistol : AZ3 /IWATA WS400 / W400 / W400WB / W400 BELLARIA Nozzle + Needle: 1.5 mm to 1.8mm Paint flow: 140 - 250 ml/min Air cap: LV2 / BA4-1 / WB1 / WBX Gun pressure: 1.8 – 2.5 Bars

Airless Nozzle: 0,013 - 0,017 mm Pressure: 100 - 200 Bars

Electrostatique Nozzle: 1.4 – 1.8 mm Pressure: 3.5 - 5 Bars



Name of lying down



Cleaning the

material

Apply in 2 coats a wet film from  $175\mu$ m to  $230\mu$ m. The layers must be closed and homogeneous.

Do the first cleaning with cleaning thinner (noble solvent without water and not recycled) and finish cleaning with the application solvent of the MAP YACHTING Paint Systems system.



Physical propertie	S	USE LIMIT TEMPERATURE : +100 °C
	Time to Drying (at 23°C – 40 to 60% RH)	Dust free: 1 hour 30 minutes Dry to touch: 3.5 hours Sandable: 24 hours with Standard Hardener
	Recovery (at 23°C – 40 to 60% RH)	Without Sanding by itself (for 130µm dry): Minimum: 6 h o u r s Maximum: 3 months
M ²	YIELD THEORETICALLY	5 m² /l for 100 $\mu$ m dry (without loss)
<u> μm</u>	Dry extract in Volume you Mixed	50 +/- 3%
	Density of Mix at 20°C	1,38 +/-0,05%
voc	Compounds organic Volatiles	450 g/l

Ĩ



() GU	ASPECT (at 60º)	Satin
	Colors	White
٢	Flash point	Base and Hardener: 23°C <= PE <= 55°C
Ţ	Storage	Store the product in a dry place and at a temperature between + 10°C and + 25°C according to the specifications of MAP YACHTING Paint Systems. Store in original unopened containers. Storage temperature may vary depending on OEM specification requirements. Refer to container label for specific information on storage time.
	Lifetime +10°C to 25°C	The information is given for closed containers in the original packaging, i.e. 24 months according to the commercial specifications of MAP YACHTING Paint Systems for the base of UNDERCOAT EP 215 HB+ and 24 months for the hardener. The shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.
Safety instruction	ns	Comply with all local safety, disposal and transportation regulations. Carefully check the Safety Data Sheet (SDS) and label of each product before using it. Safety Data Sheets are available on request.

Publication date: September 2022 - ONLY FOR PROFESSIONAL USE -

Exhaustive and is based on the current state of our knowledge and on the laws in force: anyone using the product for purposes other than those specifically recommended in the data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended use does so at its own risk. It is always the responsibility of the user to take all necessary measures to meet the requirements set by local rules and legislation. Always read the Material Data Sheet and Technical Data Sheet for that product, if available. All advice we give or statements we make about the product (whether in this data sheet or elsewhere) are correct to the best of our knowledge, but we have no control over the quality or condition of the substrate or on the many factors affecting the use and application of the product. Therefore, unless we agree otherwise in writing, we accept no liability whatsoever for the performance of the product or for any loss or damage arising from the use of the product. All products supplied and technical advice given are subject to our terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to change from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check that this data sheet is up to date before using the product. **Brand names mentioned in this data sheet are registered trademarks or licensed to:** 

MAP YACHTING Paint Systems Zone Athelia IV-296 Avenue de la Tramontane-13705 LA CIOTAT CEDEX – France