

# UNDERCOAT EP 215 HB

Technical sheet no. 19

Editing September 2022

TYPE OF PRODUCT :

## EPOXY COATING OR PRIMER

### PROPERTIES :

UNDERCOAT EP 215 HB is an epoxy polyamino-amide system applicable in high thicknesses. It combines the chemical resistance performance of polyamines and the tolerance of polyamide coatings.

UNDERCOAT EP 215 HB provides an excellent chemical barrier as an intermediate undercoat between coatings and lacquers and guarantees good stabilization of the bases.

UNDERCOAT EP 215 HB provides excellent chemical resistance to primers on ships' undersides.

Excellent resistance:

- With dry heat (100°C continuously)
- At immersion in fresh water and sea water
- To most solvents and fats
- Excellent covering performance and filling power
- Great ease of sanding
- Excellent quality and smoothness of the film after sanding

Possible application of a wet film up to 230µm in 2 crossed coats wet on wet.



Information  
Products

### COMPONENTS:



Hardeners

Thinners

Undercoat 215/230 Standard  
Undercoat 215/230 Fast

Thinners

EP n° 3

EP n° 703 Accelerator (not to be used with Undercoat 215/230 Fast hardener)

DILUTIONS:

BRUSHES AND ROLLS from 3% to 10%

PNEUMATIC GUN from 5% to 20%

AIRLESS from 3% to 5%

### SPECIFICATIONS :



Standards and  
Qualifications

MAP YACHTING *Paint Systems* SPEC

For the latest missing updates, please check with us at [sales@map-yachting.com](mailto:sales@map-yachting.com)

The information contained in this edition is based on our current knowledge and experience. Given the many factors that can affect the transformation and application of our products, this information does not in any way release any user from his obligations to carry out his own checks and tests. Nor do they constitute a guarantee of certain characteristics of the products or of their adaptation to a specific need. Any description, photo, data etc. is mentioned for information only. The most recent version cancels and replaces all previous versions. The most recent document is available on our website [www.map-yachting.com](http://www.map-yachting.com), or directly from your distributor. The recipient of our products is required to ensure that all industrial property rights and all laws and regulations in force are respected.

## 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 be primed with PU225HB or PU228HB, previously sanded and cleaned.

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

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

## Manual



### Mixing ratio

Volume (ml): 4 Base / 1 Hardener

Weight (gr): 100 (gr) Base / 15 (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 (with Standard hardener)  
10 minutes at 20°C (with Fast hardener)



### Viscosity initial of application (at 23°C)

18s to 22s AFNOR Cup n°4



### Remark

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**Shelf life of the mixture at 20°C**

6 Hours (with Standard Hardener)  
2 Hours (with Fast Hardener)



**Remark**

Dry film weight for a thickness of 100µm: 286g/m<sup>2</sup>



**Dry film thickness**

100 – 130µm

## Applications & Recommendations



**Conditions**

<u>Hardeners :</u>	<u>Undercoat 215/230 Fast</u>	<u>Undercoat 215/230 Standard</u>
Temperature:	15°C– 17°C	20 - 25°C
Hygrometry :	30 - 65%	40 - 70%



**Note**

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**

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

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#### 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

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



#### Name of lying down



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



#### Cleaning the material

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.

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Physical properties		USE LIMIT TEMPERATURE :	+100 °C
	<b>Time to Drying</b> (at 23°C – 40 to 60% RH)	Dust free: 1 hour with Standard hardener Dust free: 30 minutes with Fast hardener Dry to the touch: 4 hours with Standard Hardener Dry to the touch: 1 hour 30 minutes with Fast hardener Sandable: 24 hours with Standard Hardener Sandable: 15 hours with Fast hardener	
	<b>Recovery (at 23°C – 40 to 60% RH)</b>	Without Sanding by itself (for 130µm dry):  Minimum: 6 h with Standard hardener 3 h with Fast hardener  Maximum: 3 months with Standard Hardener 6 days with Fast hardener	
	<b>YIELD</b> THEORETICALLY	5 m² /l for 100µm dry (without loss)	
	<b>Dry extract in Volume you Mixed</b>	51 +/- 3%	
	<b>Density of Mix at 20°C</b>	1,46 +/-0,05%	
	<b>Compounds organic Volatiles</b>	Base: 426.00 g/l Hardener: 417.00 g/l Fast hardener: 385.00 g/l	

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**ASPECT**  
(at 60°)

Satin



**Colors**

White



**Flash point**

Base and Hardener: 23°C ≤ PE ≤ 55°C



**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. 48 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 215/230Standard, 12 months for the hardener 215/230 Fast. Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

## Safety instructions

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:**