

## BMA EPOXY

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*Code: BMA-PES*

*Code of the hardener: BMA-HPE810*

*Color: Catalogue colors*

### PROPERTIES

A two component Solvent Based Epoxy coating used for substrates subjected to high temperatures and destructive chemical or mechanical effects. It provides a superior protection with good impact and abrasion resistance. BMA-PES could be applied on interior and exterior steel or concrete surfaces.

### RECOMMENDED USES

BMA Epoxy can be used for:

- ✓ Concrete floors
- ✓ Chemical, industrial and plants
- ✓ Warehouses, laboratories and hospitals
- ✓ Commercial and residential environments
- ✓ Metallic and wooden car parks
- ✓ Pipelines and wastewater treatment factories

### PERFORMANCE BENEFITS

- ✓ Excellent chemical, abrasion and impact resistant
- ✓ Withstanding heavy weights
- ✓ Resistance to high temperatures
- ✓ Dust proofing capacity
- ✓ Easy cleanable

## CHARACTERISTIC PHYSICO-CHEMICAL DATA

Data corresponding to BMA Epoxy Black BMA-PES114 cross-linked with its Hardener HPE810.

Tests	Norms	Results
Total solids, by weight	ASTM D2369	69%
Specific Gravity (g/cm <sup>3</sup> )	ASTM D1475	1.363
Spreading Rate at 40µm DFT <sup>(1)</sup>	-	13.6 m <sup>2</sup> /L
Recommended WFT <sup>(2)</sup> at 5% Dilution	-	77 µm
Total Volatile Organic Compound (VOC)	ASTM D3960	419 g/L
Hardener Code	-	BMA-HPE810
Hardener Percentage, by volume	-	25%
Pot Life	-	4 hours

<sup>1)</sup> DFT: Dry Film Thickness

<sup>2)</sup> WFT: Wet Film Thickness

## APPLICATIONS GUIDE

### Surface Preparation

Before applying BMA High Build Intermediate Epoxy, all necessary pretreatment must be done. Surface should be clean, dry and free of all contaminants (oils, agents, dust, dirt, etc...) in order to avoid the risk of surface failing.

#### Metal surfaces:

For new steel, clean the surface from any oil or grease residues using 1 L of EKSEN KIMYA DL50 dissolved in 10 L of water. Sand the substrate to Sa 2 ½ until smoothing then remove all sanding dust and let it dry before any primer application.

For painted steel, remove loose and peeling paint using mechanical methods such as sanding and sandblasting of the entire surface until smoothing so the new coating can adhere properly. When the old paint is compatible with the new one, only light sanding is required. Then, remove persistent dirt and sanding residues with a detergent solution.

For non-ferrous metal (galvanized steel, aluminum, stainless steel, iron, etc...), use BMA Wash Primer BMA-WPU mixed with 1.5% of BMA Hardener BMA-HPU700 in order to etch the substrate, remove corrosion residues and promote adhesion to the subsequently applied coatings. In case of unweathered surface or when weathering is not possible, apply a sweep or brush blast cleaning using a non-metallic abrasive in order to lightly roughen the surface. Let the surface dry before coating application.

### **Concrete surfaces:**

Concrete substrate must be well prepared in order to avoid any coating defects.

For new surface, ensure that concrete is completely cured at least 30 days.

For both fresh and old concrete, decontamination is required to remove any dust, oil, grease, laitance, fatty acids or any additional contaminants. Acid etching is recommended using EKSEN KIMYA Hydrochloric Acid Solution. Decontamination could be also done using detergent scrubbing, low pressure water cleaning, or steam.

After cleaning, fill and repair any surface irregularities (cracks, holes and pores) with the cementitious mixture.

Cementitious mixture preparation: first, prepare a SBR Solution by mixing BMA SBR with water (1:5 by volume). Then, add the SBR Solution to the cement and sand until reaching the desired cementitious mixture.

Allow concrete substrate to dry then check the moisture and the pH of the substrate. Ensure that the pH is between 6 and 9 since alkalinity can affect and destroy paint adhesion. For the moisture content, make sure that it does not exceed 4% (by weight). Otherwise, the concrete surface is not a good candidate for painting.

### **Priming**

After well cleaning and drying, prime the surface with a layer of BMA Epoxy Primer BMA-PRE cross-linked with 25% by volume of its hardener BMA-HPE800.

### **Mixing**

Pour components of BMA Epoxy BMA-PES into a larger container, add 25% by volume of its hardener (HPE810) and mix them properly. Apply the mixture within its pot life (4 hours).

## Thinning

If thinning is required, use 15 to 20% of BMA Thinner Epoxy (for brush or roller application) and 20 to 25 % (for airless spraying system).

## Application

BMA Epoxy should be applied in a ventilated area where the humidity does not exceed 75% and where the temperature is above 10°C.

The product must not be exposed to any mechanical stress before being fully cured, nor to a heating or freezing source.

The application must be done on a clean and dry surface using a brush, roller or airless spraying system.

## Drying Time

Surface (Touch) dry: 20 minutes

Dry to over coat: 6 hours

Full cure time: 1 week

## AVAILABLE PACKAGING

1 US Gallon = 3.786 L; 5 US Gallons Pail = 18.9 L

## SHELF LIFE

BMA Epoxy should be stored in tightly closed containers, well-ventilated area and where the temperature varies between 10°C and 35°C. Under these storage conditions, the shelf life of BMA Epoxy will be 2 years and of its hardener it will be 1 year.

After these periods, the products should be subjected to re-inspection. Proper handling is essential to maintain good quality.

## HEALTH & SAFETY

Before using this product please consult our Safety Data Sheet (SDS) for complete information on Hazards Identification, First-Aid and Fire-Fighting Measures, Accidental Release Measures, Handling and Storage, Exposure Control and Personal Protection, Stability and Reactivity, Toxicological Information, and Transport Information.

## QUALITY ASSURANCE

BMA Commercial & Industrial s.a.l is a holder of the ISO 9001:2015 and OHSAS 18001:2007 certificates, which guarantees that all operations are conducted in compliance with International Standards.



TDS.91 - Edition #: 1

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