

## BMA PRIMER EPOXY

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*Code: BMA-PRE*

*Code of the hardener: BMA-HPE800*

*Color: Catalogue Colors*

### PROPERTIES

A two component Solvent Based Epoxy, with good hardness and chemical resistance, used as a primer to provide chemical protection and mechanical strength against environmental conditions. It is applied on any type of indoor and outdoor well prepared concrete walls, floors substrates and metal substrates.

### RECOMMENDED USES

BMA Primer Epoxy is used for:

- ✓ Concrete walls and floors
- ✓ Chemical, water and power plants
- ✓ Marine applications and swimming pools
- ✓ Warehouses and parkings

### PERFORMANCE BENEFITS

- ✓ Good heat, salt water and chemical resistance
- ✓ Good corrosion protection from environmental impact
- ✓ Good abrasion and impact resistance
- ✓ Good adhesion to the surface
- ✓ Withstanding heavy duties
- ✓ Good non-slipping properties
- ✓ High durability

## CHARACTERISTIC PHYSICO-CHEMICAL DATA

Material Analysis of **Primer Epoxy (Part A)** cross linked with **Hardener BMA-HPE800 (Part B): (A+B):**

Tests	Norms	Results
Total Solids, by weight	ASTM D1259	74%
Consistency, at 25°C (Part A)	ASTM D562	30 Poises
Specific Gravity (g/cm <sup>3</sup> )	ASTM D1475	1.47
Total Volatile Organic Compound (VOC)	ASTM D3960	387.6 g/L
Spreading Rate at 40 µm DFT <sup>(1)</sup>	-	15 m <sup>2</sup> /L
Recommended WFT <sup>(2)</sup> @10%	-	77 µm
Hardener Code	-	BMA-HPE800
Hardener Percentage	-	25%
Pot Life	-	2 hours

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

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

## APPLICATIONS GUIDE

### Surface Preparation

Before applying BMA Primer 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.

#### 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.

### **Metal Surfaces:**

For new steel, clean the surface from any oil or grease residues using a solution (1:10) of Eksen Kimya (1 L of EKSEN KIMYA DL50 dissolved in 10 L of water). Sand the substrate to Sa 2½ 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 in order to etch the substrate, remove any 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.

### **Mixing**

Mix thoroughly 25% by volume of the hardener BMA-HPE800 with BMA Primer Epoxy. Apply the mixture within its pot lifetime (2 hours) at ambient temperature.

## Thinning

If thinning is necessary, a maximum of 10- 15 % (for brush or roller application) and 15- 20% (for airless spraying system) of BMA Thinner Epoxy (BMA-THI130) could be added in order to obtain the required viscosity of the mixture.

## Application

BMA Primer Epoxy should be applied in a well-ventilated area where the humidity does not exceed 85% and when the temperature varies between 5°C and 40°C.

The application must be done on a clean and dry surface using a brush, roller or airless spraying system within the pot life of the prepared mixture (4 hours). It is recommended to apply the first coat of BMA Primer Epoxy using a brush in order to avoid any formation of holes and fish eyes on the surface. The product should not be exposed to heavy mechanical stress before being full cured.

Overcoating could be done after 6 hours using for example BMA Enamopoxy cross-linked with 25% of its hardener BMA-HPE800.

The substrate should be dried for 2 days before light foot traffic, 5 days before heavy foot traffic and 10 days before vehicle traffic.

## Drying Time

Surface (touch) dry: 2 hours

Dry to over coat: 10 - 24 hours

Dry to handle: 24 – 48 hours

## AVAILABLE PACKAGING

Gallon Kit = 4L + 2L; Pail Kit = 20L + 5L

## SHELF LIFE

BMA Primer Epoxy should be stored in closed and undamaged containers in a well-ventilated area where the temperature varies between 5°C and 35°C and away from any source of heat or freezing. Direct exposure to sunlight should be avoided.

Under these conditions, the shelf life of BMA Primer Epoxy will be 1 year and of its hardener 1 year.

After these periods, the products are 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 ISO 45001:2018 certificates, which guarantees that all operations are conducted in compliance with International Standards.

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