

# BMA ENAMOPOXY ECONOMIC

Code: BMA-EEE

Code of the hardener: BMA-HPE800

Color: Catalogue colors

## PROPERTIES

A two component enamel epoxy designed as an economical coating providing excellent resistance to chemical attack, abrasion and mechanical stresses. It could be applied on concrete floors and any type of metallic substrate.

## RECOMMENDED USES

BMA Enamopoxy could be used for:

- ✓ Concrete floors
- ✓ Chemical and power plants
- ✓ Pipelines and storage tanks
- ✓ Marine applications, aquariums and swimming pools
- ✓ Warehouses, hospitals and hotels

## PERFORMANCE BENEFITS

- ✓ Corrosion and oxidation protection
- ✓ Resistance to heat, salt water and a wide range of chemicals
- ✓ Good protection against abrasion, impact and scratch effects
- ✓ Withstanding heavy duties
- ✓ High durability
- ✓ Easy coverage and cleanability

## CHARACTERISTIC PHYSICO-CHEMICAL DATA

Data corresponding to **BMA Enamopoxy economic** cross linked with its hardener **BMA-HPE800**.

Tests	Norms	Results
Total solids, by weight	ASTM D2369	65.5%
Total solids, by volume	ISO 3233	55%

Specific Gravity (g/cm <sup>3</sup> )	ASTM D1475	1.24
Viscosity, at 25°C ( <b>Part A</b> )	ASTM D562	10 Poises
Total volatile organic compound (VOC)	ASTM D3960	383 g/L
Flash Point	ASTM D3278	20°C
Spreading Rate at 40 µm DFT <sup>(1)</sup>	-	14.2m <sup>2</sup> /L
Recommended WFT <sup>(2)</sup> @10%	-	72 µm

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

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

## APPLICATIONS GUIDE

### Surface Preparation

Before applying BMA Enamopoxy Economic, 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.

### Priming

Before applying BMA Enamopoxy Economic, 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 surface should be protected with one or two cross coats of BMA Insulopoxy BMA-INE cross-linked with 25% of its hardener BMA-HPE800, followed by BMA Primopoxy for Concrete BMA-CPE cross-linked with 25% of its hardener BMA-HPE800.

#### **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 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 Enamopoxy Economic. Leave the mixture for 30 minutes to allow a complete chemical reaction between the components. Apply the mixture within its pot lifetime (2 hours) at ambient temperature.

### Thinning

If thinning is required, a maximum 10 - 15% (for brush or roller application) and 15 - 20% (for air spraying system) of BMA Epoxy Thinner or BMA Thinner 050 could be used to obtain the required viscosity.

### Application

BMA Enamopoxy Economic should be applied in a well-ventilated area where the humidity does not exceed 85% and when the temperature varies between 5°C and 35°C. The application must be done on a clean and dry surface using brush, roller or airless spraying system within the pot life of the product (2 hours).

Two coats of BMA Enamopoxy Economic are usually required for indoor and outdoor applications on steel, galvanized steel and concrete substrates. For outdoor application, it is required to finish with PU Acrylic Topcoat.

### Drying Time

Surface (touch) dry: 2 hours  
Dry to over coat: 10 - 24 hours  
Full cure: 1 week

### AVAILABLE PACKAGING

Gallon Kit = 3.786 L + 1 L; Pail Kit = 20 L + 5 L

### SHELF LIFE

BMA Enamopoxy Economic should be stored in unopened and undamaged containers in well-ventilated areas where the temperature varies between 5°C and 35°C. The product must be kept away from any heat, freezing source and direct exposure to sunlight.

Under these conditions, the shelf life of BMA Enamopoxy Economic will be 2 years and for its hardener 1 year.

After these periods, the products are subjected to re-inspection. Proper handling is required 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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