

BMA HIGH BUILD MIOPOXY

Code: BMA-HBM

Code of its hardener: BMA-HPE815

Color: White, Black, Grey, Red & Yellow

PROPERTIES

BMA High Build Miopoxy is a two-component, amine cured, MIO pigmented epoxy coating, resistant to water penetration. Upon the multiple uses of the High Build Miopoxy it can be used as a multicoat, as a primer, as an intermediate coat or as a finish epoxy coat. BMA-HBM is the ideal epoxy paint to be used when a fast drying, a high solid finish and a high build product is required. BMA Miopoxy could be used as one element in an epoxy system on metals and concrete.

RECOMMENDED USES

BMA High Build Miopoxy can be used for:

- ✓ Concrete
- ✓ Metal
- ✓ Steel (Carbon, Stainless, Galvanized, Aluminum all pre-treated with BMA wash primer)
- ✓ Onshore and offshore structural steel work, installations, pipe work, tank external surfaces and bridges, exposed to high corrosive environments
- ✓ Power plants, mining equipment, refineries, new constructions and maintenance

PERFORMANCE BENEFITS

- ✓ Great coverage (Pigmented with micaceous iron oxides) & Fast drying
- ✓ High solid, High built
- ✓ Easy application and handling
- ✓ Excellent resistance to chemicals & weathering
- ✓ Anti-slip finish.
- ✓ Remarkable adhesion to steel, very durable and long lasting.
- ✓ Supreme water impermeability.
- ✓ Ideal for onshore and offshore metallic structures exposed to corrosive conditions.
- ✓ Could be applied even at low temperature around 0°C.

CHARACTERISTIC PHYSICO-CHEMICAL DATA

Data corresponding to **BMA High Build Miopoxy** cross-linked with its hardener **BMA-HPE815**

Tests	Norms	Results
Total solids, by weight	ASTM D2369	80%
Total solids, by volume	ASTM D1259	66%
Specific gravity (g/cm ³)	ASTM D1475	1.5
Viscosity, @25°C (without hardener)	ASTM D562	20 Poises
Total Volatile Organic Compound (VOC)	ASTM D3960	300 g/L
Spreading Rate at 70 µm DFT ⁽¹⁾	-	9.4 m ² /L
Recommended WFT ⁽²⁾ (µm)	-	110 µm
Hardener Code	-	BMA-HPE815
Hardener percentage	-	25%
Induction Time	-	10 min
Pot Life	-	120 min

¹⁾DFT: Dry Film Thickness

²⁾WFT: Wet Film Thickness

APPLICATIONS GUIDE

Surface Preparation

Before applying BMA High Build Miopoxy, 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 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, etc...), use a thin layer of BMA Wash Primer BMA-WPU 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**Metal surfaces:**

Steel surface should be primed to ensure corrosion protection, preferably with BMA Zincopoxy Primer or BMA Zincphosphatopoxy Primer.

Concrete surfaces:

Concrete surface should be primed with BMA Primopoxy for Concrete BMA-CPE.

Mixing

Mix thoroughly 25% by volume of the hardener BMA-HPE815 with BMA High Build Miopoxy. Leave the mixture for 10 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 necessary, a maximum 5% of BMA Thinner Epoxy BMA-THI130 could be added in order to obtain the required viscosity of the mixture.

Application

BMA High Build Miopoxy should be applied in a ventilated area where the humidity does not exceed 85% and the temperature varies between 5°C and 35°C.

The application must be done on a clean and dry surface using a brush, roller or airless spraying system within 2 hours.

On New Substrate when a high thickness is required:

- Apply a layer of the High Build Miopoxy with a 250µm DFT directly on the substrate or on a non-peeled compatible primer such as a dry solvent borne epoxy primer or paint.
- Let dry for at least 2 - 3 hours before re-coating.
- Apply a final layer of the High Build Miopoxy with an almost 250µm DFT and let cure for 1 week.

On New Substrate when a normal thickness is required:

- Prime the clean, dry and treated (if necessary) substrate with BMA Zincopoly primer BMA-ZRP071 + 25% hardener BMA-HPE830 and let dry for at least 4 – 5 hours.
- Apply one coat of the Miopoxy.
- Let dry for at least 3 hours before re-coating.
- Apply a final coat of a PU paint, a PU acrylic paint or of any final industrial coating.

On a Pre-Painted Substrate:

- Make sure that the previous coating is totally dry and cured with no peeling.
- Make sure that the previous coating is compatible with the Miopoxy (solvent-based epoxy system) although effectuate a compatibility test on a small area before full application.

Drying Time

Surface (Touch) dry: 1 hour
Dry to over coat: 3 hours
Full cure time: 1 week

AVAILABLE PACKAGING

Gallon kit: 4L + 1L; Pail kit: 20L + 5L

SHELF LIFE

BMA High Build Miopoxy should be stored in undamaged and unopened containers where the temperature varies between 5°C and 35°C. The product must be kept away from direct exposure to sunlight or any heat or flame source.

Under these conditions, the shelf life of BMA High Build Miopoxy will be 2 years and the shelf life of its hardener will be 1 year.

After these periods, the products quality is 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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