

## BMA ZINC POSPHATE PRIMER EPOXY HS

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*Code : BMA-ZPH199*

*Code of its hardener: BMA-HPE 821*

*Color: White, Black, Grey*

### PROPERTIES

A two-component polyamide solvent-based epoxy cured with zinc phosphate pigment, with high chemical and heat resistance, excellent adherence and non-toxicity properties. It is used as a protective coating against environmental corrosion effects by providing a non-conducting barrier layer to the surface. It is suitable for use as a primer on exterior or interior steel surfaces or any metallic substrate subjected to water immersion.

### RECOMMENDED USES

BMA Zinc Phosphate Primer Epoxy HS can be used for:

- ✓ Chemical, industrial, water and petroleum plants
- ✓ Food processing industries
- ✓ Pipelines, storage tanks and reservoirs
- ✓ Hotels and living buildings.

### PERFORMANCE BENEFITS

- ✓ Excellent anti-corrosive properties
- ✓ Excellent chemical, saline and marine resistance
- ✓ Very good adherence to the treated substrate
- ✓ Lead and chromate free (a non-toxic primer)
- ✓ Suitable for interior and exterior use.

## CHARACTERISTIC PHYSICO-CHEMICAL DATA

Material Analysis of **Zinc Phosphate Primer Epoxy HS (Part A)** cross linked with **Hardener BMA-HPE821 (Part B): (A+B):**

Tests	Norms	Results
Total solids, by volume	ISO 3233	70 %
Consistency, at 25°C (Part A)	ASTM D562	15 Poises
Specific Gravity (g/cm <sup>3</sup> )	ASTM D1475	1.4
Total Volatile Organic Compound (VOC), by weight	ASTM D3960	395 g/L
Spreading Rate at 75µm DFT <sup>(1)</sup>	-	9.3 m <sup>2</sup> /L
Recommended WFT <sup>(2)</sup> @5% dilution	-	75 µm
Hardener Code	-	HPE820
Mixing ratio by volume (Base to hardener)	-	3:1
Induction Time	-	30 min
Pot Life	-	5 hours

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

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

## APPLICATIONS GUIDE

### Surface Preparation

Before applying BMA Zinc Phosphate Primer Epoxy HS, 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.

#### Steel surfaces:

Several steps should be followed in order to ensure the adhesion of the coating to the surface, achieve optimum performance and maximize the lifetime of the applied coating system. In this purpose, clean, remove rust residues, sand the substrate and let it dry.

For oil, grease, peeling paint or foreign materials removal, use proper degreasing agents, such as solvents or suitable alkaline detergents. For better results, use 1L of BMA EKSEN

KIMYA DL50 cleaner dissolved in 10 L of water. Also, for blast cleaning, use phosphoric acid to Sa 2 ½: Add 10% of acid solution to water, mix and apply the obtained mixture to the metal surface using a brush.

After cleaning, use mechanical methods, such as sanding and sandblasting of the entire surface until smoothing so the coating can adhere properly. Air drying is required before any primer application.

For **galvanized steel**, clean the surface using water detergent followed by hot water 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 in order to lightly roughen the surface without removing a significant amount of the galvanized coating. It is recommended to use a fine, non-metallic abrasive for the cleaning procedure.

## Mixing

Pour components of BMA Zinc Phosphate Primer Epoxy HS into a larger container, add 25% by volume of its hardener (HPE821) and mix them properly. Apply the mixture within its pot lifetime (30 min). Otherwise, it will be unusable.

## Thinning

If thinning is necessary, use about 10 to 15% of thinner for brush, roller or spray application. Avoid a high thinner percentage so the primer opacity is not affected.

## Application

BMA Zinc Phosphate Primer Epoxy HS should be applied in a ventilated area where the substrate temperature varies between 10°C and 40°C and when the humidity does not exceed 85%. BMA Zinc Phosphate Primer Epoxy HS should be applied on a clean and dry surface after sufficient stirring and mixing and within its pot lifetime (5 hours), using brush, roller, spraying system.

Overcoating is possible after 24 hours at 25°C.

## Drying Time

Surface (Touch) dry: 3 hours

Full cure: 4 days

## AVAILABLE PACKAGING

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

## SHELF LIFE

BMA Zinc Phosphate Primer Epoxy HS 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 Zinc Phosphate Primer Epoxy HS is 1 year and of its hardener it will be 6 months.

After this period, the primer 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 ISO 45001:2018 certificates, which guarantees that all operations are conducted in compliance with International Standards.

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