

BMA EPOXY WATER TANK

Code (Part A): BMA-WTE054

Code of its hardener (Part B): BMA-HPE930

Color: Off White

PROPERTIES

BMA Epoxy Water Tank is a two-component, solvent free 100% solid, based on phenalkamine epoxy resin. BMA-WTE is formulated for water tanks including potable water tanks, it is applied over prepared steel and concrete for water. It has a great resistance to abrasion, high pressures and chemical resistance, BMA Epoxy Water Tank has also a superior corrosion resistance.

RECOMMENDED USES

BMA Epoxy Water Tank could be used for:

- ✓ Prepared steel, aluminum, fiberglass
- ✓ Prepared concrete

PERFORMANCE BENEFITS

- ✓ Virtually 0 VOC, Low odor
- ✓ Fast drying
- ✓ Great resistance to abrasion and high pressures
- ✓ Remarkable coverage and chemical resistance
- ✓ Can be applied over aged epoxy system
- ✓ Heat generation during the mixture of the epoxy resin with its catalyst
- ✓ Superior corrosion resistance
- ✓ In compliance with FDA Title 21 CFR 175.300

CHARACTERISTIC PHYSICO-CHEMICAL DATA

*Data corresponding to **BMA Epoxy Water Tank**, off white, cross-linked with its **hardener BMA-HPE930***

Tests	Norms	Results
Total solids, by weight	ASTM D2369	99%
Viscosity, @ 25°C (Part A)	ASTM D562	160 KU
Specific Gravity (g/cm ³)	ASTM D1475	1.6
Total Volatile Organic Compound (V.O.C)	ASTM D3960	10 g/L
Spreading rate at 100 µm DFT ⁽¹⁾	-	9.8 m ² /L
Recommended WFT ⁽²⁾	-	108
Hardener Code	-	BMA-HPE930
Hardener Percentage, by volume	-	50%
Pot Life	-	80 mins

¹⁾DFT: Dry Film Thickness

²⁾WFT: Wet Film Thickness

APPLICATIONS GUIDE

Surface Preparation

Before applying BMA Epoxy Water Tank, 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

For metallic non-ferrous surfaces, a 15µm layer of wash primer can be applied first. For concrete surfaces, a 45 to 60 µm layer of Insulopoxy for Concrete INE000 can be applied as a first layer before applying BMA Epoxy Water Tank.

Mixing

Pour components of BMA Epoxy Water Tank into a larger container, add 50% by volume of its hardener (HPE930) and mix them properly. Apply the mixture within its pot life (80 mins).

Application

BMA Epoxy Water Tank should be applied in a well-ventilated area where the humidity does not exceed 85% and the temperature varies between 5°C and 38°C. The application must be done on a clean and dry surface using a brush, roller or spraying system.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross-coat spray at a right angle.

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

Drying Time

Surface (touch) dry: 2 hours

Dry to handle: 8 hours

Full cure: 7 days

AVAILABLE PACKAGING

5 USG (Pail) for part A and 2.5 USG (Pail) for part B (one pail kit)

1 USG for part A and 0.5 USG for part B (one gallon kit)

SHELF LIFE

BMA Epoxy Water Tank should be stored in unopened and undamaged containers in a well-ventilated area where the humidity does not exceed 85% and the temperature varies between 5°C and 38°C. The storage must be far away from direct exposure to sunlight or any heating and freezing source.

Under the above-mentioned storage conditions the shelf life of BMA Water Tank will be 2 years. After this period, the paint 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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