BMA PU ACRYLIC PAINT

TECHNICAL DATA SHEET

Product Code: 1BM-PAK
Hardener Code: 1BM-HPU0600

I. Product Description

A two component PU acrylic based modified to highly resist UV light, aggressive environmental and marine conditions. It's also ideal to withstand physical and chemical strength. In addition to its weathering resistance, it's anti-yellowing and very durable. BMA PU Acrylic Paint is your ideal solution in any industrial or offshore project.

II. Product Performance Characteristics

- Withstanding chemical and physical environments
- Great gloss retention
- Non yellowing
- Great chemical and physical resistance
- Ideal to be exposed to aggressive environmental or marine conditions
- Withstands direct sunlight
- Long term performance
- Easily recoatable
- Easily bonded to epoxy system
- Outstanding UV resistance
- Long-term protection for 15 years and more

III. Areas of Application

BMA PU Acrylic Paint can be used for:

- Commercial, architectural, and structural steelwork
- Buses and trucks body paintings
- Refineries and power plants
- Offshore steel works
- Versatility: can be used in various applications
- Approved anti-corrosive top coat for C5 environment, as per ISO 12944-6:2018, to be applied with suitable intermediate coat and primer

IV. Technical Specifications

Data for BMA PU Acrylic Paint cross linked with its hardener 1BM-HSP:

Parameter	Norm/Standard	Result
Total Solids, by weight (%)	ASTM D2369	51
Total Solids, by volume (%)	ISO 3233	50.42%
Viscosity at 25°C (Poises)	ASTM D562	10
Specific Gravity (g/cm^3)	ASTM D1475	1.3
Total Volatile Organic Compound (VOC) (g/L)	ASTM D3960	418.4
Theoretical Spreading Rate (m^2/L)	-	10.08-16.8
Recommended WFT [2] (µm)	-	60-100
Recommended DFT [1] (µm)	-	30-50
Appropriate solvent	-	BMA Thinner PU
Solvent ratio by volume (%)	-	20-25
Pot Life at 23 °C (minutes)	ISO 9514:2005	90
Hardener percentage by volume (%)	-	25

[1] DFT: Dry Film Thickness
[2] WFT: Wet Film Thickness

V. Application Procedure

Surface Preparation

Before applying BMA PU Acrylic Paint all necessary pretreatment must be done. Surface should be clean, dry and free of all contaminants (oils, dust, dirt, etc…) in order to avoid the risk of surface failing.

Steel Surfaces

For new steel, clean the surface from any oil or grease residues using a solution of SAMAS 3in1 Phospating Additive diluted in clean water in the ratio (1:35). 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…), remove corrosion residues and promote adhesion to the subsequently applied coatings, use a thin layer (8-10 µm) of BMA Wash Primer in order to etch the substrate. In case of unetched surface or when etching 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.

To adjust the surface unevenness, BMA putty polyester should be applied.

For corrosion prevention, the cleaned surface should directly be primed.

Priming

A DFT of 40 microns of BMA Zinc Rich Epoxy Primer is required for priming, followed by 80 microns of BMA High Build Intermediate Epoxy.

Mixing

Pour contents of BMA PU Acrylic Paint into a larger container, add 25% from 1BM-PAK, mix well and wait about 4 – 5 minutes to sweat before application.

Thinning

Thin with 20 – 25% of BMA PU Thinner THI0070 to dilute the paint for a smoother application.

Application

BMA PU Acrylic Paint should be applied in a well-ventilated area where the humidity does not exceed 85% and the temperature varies between 5°C and 40°C. The application must be done using a brush, roller or airless spraying system.

VI. Drying Conditions

Condition	Time
Surface Touch Dry	30 minutes to 2 hours
Dry to over coat	8 to 12 hours
Full cure time	4 to 5 days

VII. Color Range

Colors available upon request.

VIII. Packaging

Available in:
Gallon & Pail kits.

IX. Shelf Life & Storage Conditions

Shelf Life	Storage Temperature & Humidity	Storage Conditions
▪ Shelf life: 2 years from manufacturing date ▪ Shelf life of hardener: 1 year	▪ **Temperature:** Between 5ºC and 35ºC ▪ **Humidity:** Should not exceed 85%	Store in undamaged, unopened containers. The product must be kept away from direct sunlight and any sources of heat or flame.

X. Safety, Health, and Environmental Compliance

Aspect	Details
Environmental Impact	Contains volatile organic compounds (VOCs); avoid release into the environment. Dispose of in accordance with local environmental regulations. Prevent contamination of soil and waterways.
Health Hazards	Harmful by inhalation, skin contact, and if swallowed. May cause allergic skin reactions, respiratory irritation, or eye damage. Prolonged exposure may affect the central nervous system.
Safety Precautions	Use only in well-ventilated areas. Wear appropriate personal protective equipment (PPE) including gloves, goggles, and a respirator. Avoid direct contact with skin and eyes. Do not eat, drink, or smoke while using the product.
First Aid Measures	**Inhalation:** Move to fresh air; seek medical attention if symptoms persist. **Skin Contact:** Wash immediately with soap and water. Remove contaminated clothing. **Eye Contact:** Rinse cautiously with water for several minutes. Seek medical advice. **Ingestion:** Do not induce vomiting. Rinse mouth and seek immediate medical assistance.

XI. Certifications and Test Reports

BMA Commercial & Industrial s.a.l holds ISO 9001:2015, ISO 45001:2018, and ISO 14001:2015 certifications, ensuring that all operations are conducted in compliance with international standards. This product is certified according to DIN EN ISO 12944-6:2018-06, C5-VH, Test Regime 2.

XII. Disclaimer

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