BMA POLYURETHANE PAINT

TECHNICAL DATA SHEET

Product Code: 1BM-PPU
Hardener Code: if glossy: 1BM-HPU0200, if not glossy: 1BM-HPU0100

I. Product Description

BMA Polyurethane Paint is a two-component isocyanate cured polyurethane coating formulated with high solid, good hardness, good elasticity and good chemical resistance. BMA Polyurethane Paint comes in 2 standards colors: black & white, other colors are provided upon request. It comes also in different gloss levels (glossy, matt, demi-matt, 30% matt). It is suitable for application over any wooden and steel substrates.

II. Product Performance Characteristics

- Excellent weather resistance & durability
- Water resistance, chemical, alkali, fungi, and high abrasion resistance
- High solid
- High flexibility & hardness
- Anti-scratch

III. Areas of Application

BMA PU Paint can be used for:

- Wooden frames, panels, and furniture.
- Commercial, architectural, and structural steelwork.
- Primed plastic and primed fiberglass.

IV. Technical Specifications

Data for BMA PU Paint, cross-linked with the selected hardener 1BM-HPU0200 (glossy) or 1BM-HPU0100 (not glossy), white color as a reference:

Parameter	Norm/Standard	Glossy	Demi-Matt	Matt
Total Solids, by weight (%)	ASTM D1259	55	58	60
Total Solids, by volume (%)	ISO 3233	50	43	44

Viscosity at 25°C (Poises)	ASTM D562	15	10	10
Specific Gravity (g/cm^3)	ASTM D1475	1.37	1.27	1.33
Total Volatile Organic Compound (VOC) (g/L)	ASTM D3960	463	534	522
Theoretical Spreading Rate (m^2/L)	-	10-14.28	8.6-12.28	8.8-12.6
Recommended WFT [(2)] (µm)	-	75	90	87
Recommended DFT [(1)] (µm)	-	35-50	35-50	35-50
Appropriate solvent	-	BMA Thinner PU	BMA Thinner PU	BMA Thinner PU
Solvent ratio by volume (%)	-	15-20	15-20	15-20
Induction Time (minutes)	-	5-8	5-8	5-8
Pot Life (hours)	-	1	1	1
Hardener Percentage by Volume (%)	-	50	50	50

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

V. Application Procedure

Surface Preparation

Before applying BMA PU 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.

Treatment of wooden surfaces

Moisture content in wood should not exceed 10%. A suitable filler should be applied to fill cracks and holes. Sand and smooth wooden surfaces. BMA Polyurethane insulator should be applied over the clean surface in order to isolate the wood before applying any primer.

Treatment of steel surfaces

To obtain optimum performance, for metal surface, substrate must be cleaned by blast cleaning method. Acid and alkali rust scale should be neutralized by ammonia solution (5%). New steel must have surface profile to have key by means of mechanical or chemical etching. Old aged coatings must be removed with Multichimica remover.

Priming

A Dry Film Thickness of 35 µm of BMA polyurethane primer (PPU 060 cross-linked with HPU 300) should be applied directly after preparing, cleaning and drying the surface. Primer should be allowed to become tack-free before being sanded.

Mixing

Pour contents of BMA Polyurethane Paint into a larger container, add its corresponding hardener (HPU100 or HPU200) and mix them thoroughly. The hardener percentage to the base component is 50% by volume.

Thinning

BMA Polyurethane Paint can be diluted up to 15-20% with BMA PU Thinner.

Application

BMA Polyurethane Paint should be applied in a ventilated area where the temperature varies between 5ºC and 35ºC and when relative humidity of the air does not exceed 85%.

BMA Polyurethane Paint must be applied on a dry surface. It should be applied by air spray or airless spray.

Recoating is possible after 24 hours.

VI. Drying Conditions

Condition	Time
Surface Touch Dry	1 hour
Dry to over coat	24 hours
Full cure time	1 week

VII. Color Range

Available in white and black. Custom colors are available upon request.

VIII. Packaging

Available in:
Gallon & Pail kits.

IX. Shelf Life & Storage Conditions

Shelf Life	Storage Temperature & Humidity	Storage Conditions

▪ 2 years from the manufacturing date.	▪ **Temperature:** Between 5°C and 35°C ▪ **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.

XII. Disclaimer

The statements, technical information, and recommendations contained herein are believed to be accurate. However, as the conditions and methods of use of the product and the information provided are beyond our control, BMA Commercial & Industrial s.a.l expressly disclaims any and all liability for any results obtained or consequences arising from the use of the product or reliance on this information.