BMA POLYURETHANE PRIMER

TECHNICAL DATA SHEET

Product Codes: 1BM-PPU
Hardener Code (if applicable): 1BM-HPU0300

I. Product Description

A two-component polyurethane primer with fast drying, high durability, superior adhesion properties. It is designed to improve the bonding capacity for application on any steel or wooden substrates.

II. Product Performance Characteristics

- Quick drying
- Excellent durability
- Good adhesion and sealing capacity
- Good sanding properties
- Easy to apply

III. Areas of Application

BMA PU Primer can be used for:

- Automotive vehicles and components
- Metallic or wooden furniture
- Doors and windows frames
- Industrial premises

IV. Technical Specifications

Data for BMA PU Primer:

Parameter	Norm/Standard	Result
Total Solids, by weight (%)	ASTM D1259	70
Total Solids, by volume (%)	ISO 3233	53.4
Viscosity at 25°C (Poises)	ASTM D562	30 ± 2
Specific Gravity (g/cm^3)	ASTM D1475	1.434

Total Volatile Organic Compound (VOC) (g/L)	ASTM D3960	424.27
Theoretical Spreading Rate (m^2/L)	-	10.68-17.8
Recommended WFT [2] (µm)	-	60-100
Recommended DFT [1] (µm)	-	30-50
Appropriate solvent	-	BMA Thinner PU
Solvent ratio by volume (%)	-	25-30
Hardener Percentage by volume (%)	-	50
Pot Life (hours)	-	1
Induction Time (minutes)	-	3-5

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

V. Application Procedure

Surface Preparation

Before applying BMA PU Primer, 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.

Mixing

Pour contents of BMA Polyurethane Primer into a larger container, add its corresponding hardener (1BM-HPU0300) and mix them thoroughly. The hardener percentage to the base component is 50% by volume.

Thinning

If thinning is required, use 25 to 30% of BMA Thinner PU using air spraying system.

Application

BMA Polyurethane Primer should be applied in a ventilated area where the temperature varies between 5°C and 35°C and relative humidity of the air does not exceed 65%.

BMA Polyurethane Primer must be applied on a clean and dry surface. It should be applied by air spray.

VI. Drying Conditions

Condition	Time
Surface Touch Dry	15 minutes
Dry to sand	1 to 2 hours
Dry to over coat	12 hours

VII. Color Range

According to BMA catalog colors.

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.