BMA POLYURETHANE SEALER

TECHNICAL DATA SHEET

Product Codes: 1BM-SPU
Hardener Code (if applicable): 1BM-HPU0102

I. Product Description

BMA PU Sealer is a two-component solvent-based, high solid polyurethane sealer, formulated with excellent filling properties and high ability to withstand harmful environmental conditions and any destructive mechanical impact. Due to its excellent sanding and sealing properties, this product is suitable to be used over a wide range of wooden substrates and could endure dimensional variation of the wood due to moisture ingress.

II. Product Performance Characteristics

- Sanding, covering and filling properties
- Resistance to weathering conditions
- Impact, abrasion and scratch resistance
- Fast drying ability
- Easy to use
- High durability
- High solid content

III. Areas of Application

BMA PU Sealer can be used for:

- Wood furniture
- Doors, frames and windows
- Bars and kitchens bench tops
- Bathroom's vanities
- Industrial floors

IV. Technical Specifications

Data for BMA PU Sealer cross linked with its hardener:

Parameter	Norm/Standard	Result
Total Solids, by weight (%)	ASTM D1259	51
Total Solids, by volume (%)	ISO 3233	42
Viscosity at 25°C (Poises)	ASTM D562	10
Specific Gravity (g/cm^3)	ASTM D1475	0.99
Total Volatile Organic Compound (VOC) (g/L)	ASTM D3960	533.71
Theoretical Spreading Rate (m^2/L)	-	8.4-16.8
Recommended WFT [2] (µm)	-	60-90
Recommended DFT [1] (µm)	-	25-50
Appropriate solvent	-	BMA Thinner PU
Solvent ratio by volume (%)	-	25-50
Hardener Percentage by volume (%)	-	50
Pot Life (minutes)	-	30
Induction Time (minutes)	-	2-3

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

V. Application Procedure

Surface Preparation

Before applying BMA PU Sealer, 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.

Wooden Surfaces:

For previously painted wooden surface, remove paint residues using a scraper in order to avoid the flaking of the new coating in case it is not compatible with the old one. Sand and smooth the surface then clean it well and remove the sanding dust. Let the surface dry before any primer or sealer application.

For new wood, sand the surface and all the edges lightly until smoothing. Apply BMA Polyurethane insulator for oily wooden substrate. Then, use BMA bouche-pores to close off, patch and fill all surface imperfections (cracks, holes, pores, etc.…). Clean the substrate and let it dry then make sure that the moisture content does not exceed 10%.

Sand until smoothing using a sanding paper with a 300-grit size. Clean it well before any coating application.

Mixing

Pour contents of BMA Polyurethane Sealer into a larger container, add its corresponding hardener BMA-HPU102, mix them thoroughly and wait 2 to 3 minutes before application. The hardener percentage to the base component is 50% by volume.

Thinning

Thinning is required, 25 to 50% (for air spraying application) of BMA PU Thinner could be used in order to obtain the required viscosity.

Application

BMA PU Sealer should be applied on a clean and dry surface having a temperature not less than 10°C in a well-ventilated area where the humidity does not exceed 85%.

Since the coating is a clear system, apply BMA Wood Stain 1BM-STS then 2 to 3 layers of BMA Sealer with a gap of 10 minutes between the coats. BMA Sealer PU could be applied using a brush, roller or a spraying system.

Sanding must be done after 2 hours and overcoating after 4 hours at 25°C.

VI. Drying Conditions

Condition	Time
Surface Touch Dry	30 minutes
Sanding	2 to 3 hours

VII. Color Range

Available in Pale Yellow Clear only.

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 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.

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.