

## BMA POLYURETHANE TOPCOATS

*Codes:*

Clear Matt	LPU500
Clear Satin	LPU400
Clear Glossy	LPU200
White Matt	PPU560
White Satin	PPU460
Mixing White Glossy	PPU260
Bright White Glossy	PPU960
Black Matt	PPU514
Black Satin	PPU414
Black Glossy	PPU214

*Colors: Clear, White and Black*

### PROPERTIES

A two component isocyanate cured polyurethane coating with good hardness, elasticity and good chemical resistance. It is suitable for application over any wooden and steel substrates.

### RECOMMENDED USES

BMA Polyurethane Topcoats can be used for:

- ✓ Wooden frames, panels, and furniture.
- ✓ Commercial, architectural, and structural steelwork.
- ✓ Plastic and fiberglass.

### PERFORMANCE BENEFITS

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

✓ Excellent durability

## CHARACTERISTIC PHYSICO-CHEMICAL DATA

### CLEAR

Tests	Norms	Glossy	42% Gloss	Matt
Total solids, by weight	ASTM D2369	46%	50%	50%
Consistency, at 25°C	ASTM D562	60 KU	60 KU	60 KU
Specific Gravity (g/cm <sup>3</sup> )	ASTM D1475	1.0 ± 0.1	1.0 ± 0.1	1.0 ± 0.1
Total Volatile Organic Compound (VOC)	ASTM D3960	545 g/L	523 g/L	512 g/L
Spreading Rate at 35µm DFT <sup>(1)</sup>	-	12 m <sup>2</sup> /L	12.6 m <sup>2</sup> /L	12.8 m <sup>2</sup> /L
Recommended WFT <sup>(2)</sup> at 10% Dilution	-	91 µm	86 µm	86 µm
Recommended WFT <sup>(2)</sup> at 20% Dilution	-	100 µm	94 µm	94 µm
Hardener Code	-	HPU003	HPU021	HPU021
Hardener percentage by volume	-	50%	50%	50%
Induction Time	-	5-8 min	5-8 min	5-8 min
Pot Life	-	2 hrs	2 hrs	2 hrs

### WHITE

Tests	Norms	Glossy	42% Gloss	Matt
Total solids, by weight	ASTM D2369	65%	61%	60%
Consistency, at 25°C	ASTM D562	80 KU	85 KU	95 KU
Specific Gravity (g/cm <sup>3</sup> )	ASTM D1475	1.4 ± 0.1	1.4 ± 0.1	1.4 ± 0.1
Total Volatile Organic Compound (VOC)	ASTM D3960	455 g/L	503 g/L	520 g/L
Spreading Rate at 35µm DFT <sup>(1)</sup>	-	14.5 m <sup>2</sup> /L	13.4 m <sup>2</sup> /L	14.4 m <sup>2</sup> /L

Recommended WFT <sup>(2)</sup> at 10% Dilution	-	75 µm	82 µm	77 µm
Recommended WFT <sup>(2)</sup> at 20% Dilution	-	81 µm	90 µm	83 µm
Hardener Code	-	HPU003	HPU004	HPU004
Hardener percentage by volume	-	50%	50%	50%
Induction Time	-	5-8 min	5-8 min	5-8 min

## BLACK

Tests	Norms	Glossy	42% Gloss	Matt
Total solids, by weight	ASTM D2369	53%	55%	56%
Consistency, at 25°C	ASTM D562	60 KU	80 KU	80 KU
Specific Gravity (g/cm <sup>3</sup> )	ASTM D1475	1.1 ± 0.1	1.1 ± 0.1	1.1 ± 0.1
Total Volatile Organic Compound (VOC)	ASTM D3960	500 g/L	480 g/L	470 g/L
Spreading Rate at 35µm DFT <sup>(1)</sup>	-	13.4 m <sup>2</sup> /L	8.9 m <sup>2</sup> /L	8.9 m <sup>2</sup> /L
Recommended WFT <sup>(2)</sup> at 10% Dilution	-	82 µm	123 µm	123 µm
Recommended WFT <sup>(2)</sup> at 20% Dilution	-	89 µm	134 µm	134 µm
Hardener Code	-	HPU003	HPU004	HPU004
Hardener percentage by volume	-	50%	50%	50%
Induction Time	-	5-8 min	5-8 min	5-8 min

<sup>1)</sup> DFT: Dry Film Thickness

<sup>2)</sup> WFT: Wet Film Thickness

## APPLICATIONS GUIDE

### Surface Preparation

Surface should be clean, dry and free of all contaminants (oils, agents, 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. Milesi Polyurethane insulator (LQA 836 cross-linked with LNB 837) 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 cleaned with water soluble oil emulsifiers and detergents and then rinsed with plenty of water.

### Priming

A DFT 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 Topcoat into a larger container, add its corresponding hardener (HPU003, HPU004 or HPU021) and mix them thoroughly. The hardener percentage to the base component is 25% by volume.

### Thinning

BMA Polyurethane Topcoat can be diluted up to 20% with BMA PU Thinner.

### Application

BMA Polyurethane Topcoat should be applied in a ventilated area where the temperature varies between 5°C and 35°C and when relative humidity of the air does not exceed 85%. BMA Polyurethane Topcoat must be applied on a dry surface. It could be applied by air spray or airless spray, by brush or roller.

Recoating is possible after 24 hours.

## Drying Time

Surface (Touch) Dry: 15 minutes  
Dry to over coat: 24 h  
Full cured: 1 week

## AVAILABLE PACKAGING

1 Gallon = 5 L; 1 US Gallon = 3.786 L; 5 US Gallons Pail = 18.9 L

## SHELF LIFE

BMA Polyurethane topcoat has a shelf life of 2 years from date of manufacture when stored at ambient conditions: 20°C to 25°C and normal atmospheric pressure. 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 sarl 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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*IMPORTANT: The statements, technical information and recommendations contained herein are believed to be accurate. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, BMA*

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