

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 ³) | 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 |
| Pot Life at 23°C | DIN EN ISO 9514 | 2 hrs | 2 hrs | 2 hrs |
| Induction Time | - | 5-8 min | 5-8 min | 5-8 min |
| Spreading Rate at 35µm DFT ⁽¹⁾ | - | 12 m ² /L | 12.6 m ² /L | 12.8 m ² /L |
| Recommended WFT ⁽²⁾ at 10% Dilution | - | 91 µm | 86 µm | 86 µm |
| Recommended WFT ⁽²⁾ at 20% Dilution | - | 100 µm | 94 µm | 94 µm |
| Hardener Code | - | HPU003 | HPU021 | HPU021 |
| Hardener percentage by volume | - | 50% | 50% | 50% |

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 ³) | 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 |
| Pot Life at 23°C | DIN EN ISO 9514 | 2 hrs | 2 hrs | 2 hrs |
| Induction Time | - | 5-8 min | 5-8 min | 5-8 min |
| Spreading Rate at 35µm DFT ⁽¹⁾ | - | 14.5 m ² /L | 13.4 m ² /L | 14.4 m ² /L |
| Recommended WFT ⁽²⁾ at 10% Dilution | - | 75 µm | 82 µm | 77 µm |

| | | | | |
|--|---|--------|--------|--------|
| Recommended WFT ⁽²⁾ at 20% Dilution | - | 81 µm | 90 µm | 83 µm |
| Hardener Code | - | HPU003 | HPU004 | HPU004 |
| Hardener percentage by volume | - | 50% | 50% | 50% |

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 ³) | 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 |
| Pot Life at 23°C | DIN EN ISO 9514 | 2 hrs | 2 hrs | 2 hrs |
| Induction Time | - | 5-8 min | 5-8 min | 5-8 min |
| Spreading Rate at 35µm DFT ⁽¹⁾ | - | 13.4 m ² /L | 8.9 m ² /L | 8.9 m ² /L |
| Recommended WFT ⁽²⁾ at 10% Dilution | - | 82 µm | 123 µm | 123 µm |
| Recommended WFT ⁽²⁾ at 20% Dilution | - | 89 µm | 134 µm | 134 µm |
| Hardener Code | - | HPU003 | HPU004 | HPU004 |
| Hardener percentage by volume | - | 50% | 50% | 50% |

¹⁾ DFT: Dry Film Thickness

²⁾ 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* should be applied directly after preparing, cleaning and drying the surface. Primer should be allowed to become tack-free before being sanded.

**BMA Polyurethane primer, white: PPU 060 cross-linked with HPU 300*

**BMA Polyurethane primer, black: PPU 114 cross-linked with HPU 300*

**BMA Polyurethane sealer, clear: SPU 102 cross-linked with HPU 102*

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 50% 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 5 hours.

Drying Time

Surface (Touch) Dry: 15 minutes
Dry to over coat (minimum): 5 hours
Full cure time: 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 topcoats and hardeners should be stored indoors in the original, unopened and undamaged container, in a dry place at a temperature not exceeding 30°C. Exposure to direct sunlight should be avoided.

Under the above mentioned storage conditions the shelf life of BMA Polyurethane topcoats will be 2 years and the shelf life of BMA Polyurethane hardeners will be 9 months.

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 OHSAS 18001:2007 certificates, which guarantees that all operations are conducted in compliance with International Standards.



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