

PMMA EDGE BANDS

Technical Specifications 1/3

MAJOR APPLICATIONS

ROMA PMMA (poly-methyl-methacrylate) is a shockproof, high-quality thermoplastic edgeband. It can be processed easily on edgebanding machines for covering the edges of carrier materials, mainly chipboards and MDF.

TECHNICAL CHARACTERISTICS

| Properties | Test Method | Value |
|---|-------------|---------------------------|
| Light fastness | ISO 877 | 7 |
| Hardness Shore D | ISO 868 | 80 ± 4 |
| Indentation Hardness | ISO 2039-1 | > 70 (N/mm ²) |
| Vicat Softening Temperature (50°C/h, B 50N) | ISO 306 | 100°C |
| Impact Strength, 23°C notched | ISO 179/2C | 7-8 (kJ/m ²) |
| Impact Strength, 23°C unnotched | ISO 179/2D | 70 (kJ/m ²) |
| Shrinkage (1h at 80°C) | own method | < 1.0 % |
| Resistance to Chemicals | DIN 68861 | good (1B) |
| Static Charge | | low |

TOLERANCES

| | | | |
|-------------------------|---------------------------------|----------------|----------------|
| Width | 12 - 54 mm | ± 0.45 mm | |
| Thickness | 1.0 - 1.5 mm | +0.10 / -0.10 | |
| | 1.6 - 2.0 mm | +0.10 / -0.20 | |
| | 2.1 - 3.0 mm | +0.15 / -0.25 | |
| Pretension | thickness | width < 30 mm | width ≥ 30 mm |
| | 1.0 mm | 0.00 - 0.40 mm | 0.00 - 0.50 mm |
| | 1.1 - 3.0 mm | 0.00 - 0.30 mm | 0.00 - 0.40 mm |
| Parallelism | thickness | deviation | |
| | 1.0 mm - 2.0 mm | 0.10 mm | |
| | 2.1 mm - 3.0 mm | 0.15 mm | |
| Longitudinal Distortion | < 3 mm / 1 m (or < 12 mm / 2 m) | | |
| Gloss Level | 5 - 30 | 31 - 90 | |
| | ± 3 | ± 5 | |

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MATERIAL PROPERTIES

| | |
|--------------------|---|
| Embossing | : Various embossing structures are applied according to customer requirements. |
| Wood Decors | : The inks used for the printing application have a minimum light fastness grade of 7. The decor is then coated with acrylic UV lacquer for the highest scratch resistance. |
| Primer | : The backside is primed to suit bonding with all the conventional hot-melt adhesives. |
| High-Gloss Lacquer | : A UV-based lacquer with strong scratch-resistance characteristics is used for High-Gloss applications. |

PROCESSING CHARACTERISTICS

ROMA strongly recommends the use of high-end hot-melt adhesives like an EVA-based adhesive with no filling materials or PUR adhesive for the processing of PMMA edges.

| Machining | Suitability |
|-------------------|------------------------|
| Cutting | Good |
| Milling direction | GL /GGL ⁽¹⁾ |
| - Rough milling | Good |
| - Radius milling | Good |
| - Profiling | Good |
| Side Scraping | good ⁽²⁾ |
| Buffing | good ⁽²⁾ |
| Polishability | very good |
| Stress Whitening | medium |
| CNC Workability | Good |

¹⁾ GGL: Conventional Milling, GL: Climb Milling. Conventional milling is recommended.

²⁾ Adjustment of machines might be required

PACKING INFORMATION

| Description | 1.00 - 2.00 mm |
|-----------------------|--|
| Production Method | extrusion |
| Type of Core | carton |
| Inner Core Diameter | 200 mm |
| Outside Roll Diameter | avg. 420 mm |
| Off-size Rolls | minimal |
| Length Tolerance | ± 1% |
| Joints | None |
| Packaging (all) | brown printed boxes |
| Labeling (all) | customer code and description on all box labels |
| Pallet Info (all) | shrink-wrapped with a specific Packing List for the pallet |



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STORAGE

PMMA edges should not be stored under direct sunlight or in extreme temperatures. Roma PMMA edgeband is rot resistant and can therefore be stored at room temperature (64-68°F [18-20°C]) in a weatherproof room. Under conditions of excessive moisture and humidity adhesion of the primer may be affected.

Avoiding these extreme conditions, the edge can be stored for a long time with no change to its properties. However, it is important that the material should rest for at least one day at room temperature prior to processing.

CLEANING

ROMA PMMA edge is easy to clean using commercially available cleaning agents suitable for plastic surfaces. The use of solvent or alcohol-based substances should be avoided as they could partially dissolve the surface.

HAZARDS INFORMATION

ROMA PMMA edge does not contain any materials hazardous to health that can be emitted during processing or storage.

Small chips could fly off while cutting the edgeband; eyes should be protected in such a case.

The material is suitable for recycling; it is also suitable for incineration in approved incineration plants.

All the information in this technical datasheet is given in good faith and is the result of our own experience and tests and can only be considered as a guideline for operation.

We guarantee the constant quality of our products but we cannot be held responsible for the results obtained in their use, since the conditions of work are beyond our control. We recommend that tests should be made to determine the suitability of the product for a specific purpose before the production is started.

In spite of the very good resistance to diverse chemicals, the sustained action of various vapors (cigarette smoke, kitchen fumes, etc.) may result in the discoloration of the top lacquer. These discoloration effects are beyond our control and are the result of expected wearing of the product over time.

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