



MAKROFOL[®] FR 7-2 000000

Characterization

Makrofol FR 7-2 000000 is a clear extrusion film based on Makrolon[®] polycarbonate.

Properties / Applications

Makrofol FR 7-2 000000 is glare free and scratch resistant film has been developed to be highly flame retardant and carries a UL 94 V-0 rating. Typical applications are trade show displays, light diffusion, spacers and other applications requiring a UL 94 V-0 rating.

Makrofol FR 7-2 000000 is available in various standard thicknesses from 0.010 " to 0.020 " (250 microns to 500 microns). Other thicknesses are available on request. The surface combination of Makrofol FR 7-2 000000 is one side velvet and one side very fine matte. As with any product, use of Makrofol FR 7-2 000000 in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.



MAKROFOL® FR 7-2 000000

Typical Properties*

| Property | Test Method | Unit | Value |
|---|-------------|---|------------------------------------|
| General | | | |
| Specific Gravity | ASTM D 792 | | 1.30 |
| Conversion Factor | | ft ² /lb•mil m ² /kg•mm | 148 0.769 |
| Gloss 60° top side black inked second surface | ASTM D 2457 | gloss unit | 3 to 6 |
| Roughness, R3z, top side | ISO 4287/88 | µm | 16 to 23 |
| Roughness, R3z, reverse side | ISO 4287/88 | µm | ≤ 9.0 |
| Surface | | | velvet/v.f. matte |
| Mechanical | | | |
| Tensile Strength, Yield | ASTM D 882 | psi | 10,600 |
| Tensile Strength, Break | ASTM D 882 | psi | 8,530 |
| Elongation at Break | ASTM D 882 | % | 60 |
| Tear Strength, Initiation | ASTM D 1004 | lb/in | 1,100 |
| Thermal | | | |
| Coefficient of linear thermal expansion parallel 20°C to 120°C | DIN 53752 | 10 ⁻⁶ /K | 70 |
| Coefficient of linear thermal expansion across 20°C to 120°C | DIN 53752 | 10 ⁻⁶ /K | 70 |
| Heat Deflection Temperature 1.82 MPa | ASTM D 648 | °F | 270 |
| 0.45 MPa | | | 288 |
| Vicat Softening Temperature, Rate A | ASTM D 1525 | °F | 297 |
| Flammability | | | |
| UL Listing | UL 94 V-0 | min. thickness | 0.010" (250 µm) |
| Optical | | | |
| Haze | ASTM D 1003 | % | 89 |
| Light Transmittance | ASTM D 1003 | % | > 70 (> 20 mil) > 80 (< 20 mil) |
| Yellowness Index | ASTM E 313 | | 1 |
| Other | | | |
| Water Absorption (immersion at 73°F/24h) | ASTM D 570 | % | 0.33 |

*These items are provided as general information only. They are approximate values and are not part of the product specifications.



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Health and Safety Information

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling this product. Before working with this product, you must read and become familiar with the available information on its risks, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., safety data sheets and product labels. For further information contact your Covestro LLC representative or the Product Safety and Regulatory Affairs Department in Pittsburgh, PA.

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page 3 of 3

**Document contains important information
and must be read in its entirety.**

Edition 2014-08-12

Replaces edition dated 2012-05-08

Distributed by:

 **Piedmont Plastics[®]**
www.piedmontplastics.com

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Product Datasheet