



MAKROFOL® LT 6-4 900009

Polycarbonate Film

Description and Application

Makrofol LT 6-4 900009 is a glare free, glass filled extrusion film based on Makrolon® polycarbonate. It combines unique high inherent stiffness with black translucency. Typical applications are rear illuminated gauges, dials and graphics, automotive instrument dials, radios and appliance indicator lamps and control panels, and backlit signs.

Makrofol LT 6-4 900009 is available in a standard thickness of 0.016" (420 microns). Other thicknesses are available on request. The surface combination of Makrofol LT 6-4 900009 is one side fine velvet and one side fine matte. As with any product, use of Makrofol LT 6-4 900009 in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.

Typical Properties*

Property	Test Method	Unit	Value
General			
Specific Gravity	ASTM D 792		1.41
Conversion Factor		ft ² /lb·mil m ² /kg·mm	136 0.709
Gloss 60° top side	ASTM D 2457	gloss unit	--
Gloss 60° reverse side	ISO 2813	gloss unit	--
Roughness, R3z, top side	ISO 4287/88	µm	--
Roughness, R3z, reverse side	ISO 4287/88	µm	--
Surface			f.velvet/f.matte
Mechanical			
Tensile Strength, Yield	ASTM D 882	psi	--
Tensile Strength, Break, parallel	ASTM D 882	psi	8,700
Tensile Strength, Break, across	ASTM D 882	psi	7,250
Elongation at Break	ASTM D 882	%	3
Tensile Modulus	ASTM D 882	psi	798,000
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
Shrinkage, parallel 130°C, 1h	IEC 60674-2	%	0.15
Shrinkage, across 130°C, 1h	IEC 60674-2	%	0.15
Heat Deflection Temperature			
1.82 MPa	ASTM D 648	°F	--
0.45 MPa	ASTM D 648	°F	--
Vicat Softening Temperature, Rate A	ASTM D 1525	°F	--
Flammability			
Burning Rate (FMVSS 302)	ISO 3795	mm/min	≤ 100
UL Listing	UL 94 V-0	min. thickness	0.015" (380 µm)
UL Listing	UL 94 V-2	min. thickness	--
UL Listing	UL 94 VTM-0	min. thickness	--
UL Listing	UL 94 VTM-2	min. thickness	0.008" (200 µm)
Optical			
Haze	ASTM D 1003	%	--
Light Transmittance	ASTM D 1003	%	≥ 20
Yellowness Index	ASTM E 313		--
Other			
Water Absorption (saturation)	ISO 62	%	--
Water Absorption (immersion at 73°F/24h)	ASTM D 570	%	0.20

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

Health And Safety Information

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling Makrofol LT 6-4 900009. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets and product labels. Consult your local Bayer MaterialScience representative or contact Bayer's Product Safety and Regulatory Affairs Department in Pittsburgh, PA.

Note: The information contained in this bulletin is current as of November 2011, please contact Bayer MaterialScience to determine whether this publication has been revised.

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