

MAKROFOL[®] LM 905 2-4 160009

Characterization

Makrofol LM 905 2-4 160009 is an extruded polycarbonate film.

Properties / Applications

Makrofol LM 905 2-4 160009 is an extruded polycarbonate film filled with light-scattering agent. It displays a smooth homogenous illumination of the front side of a backlight part even if a point source is applied. Typical applications are automotive instrument panels and backlight displays.

Makrofol LM 905 2-4 160009 is available in standard thicknesses of 0.012" and 0.020" (300 microns and 500 microns). The surface structure of Makrofol LM 905 2-4 160009 is one side very fine matte and one side fine matte. As with any product, use of Makrofol LM 905 2-4 160009 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			
Density	ISO 1183 20°C, Method C	g/cm ³	1.2
Gloss	ISO 2813, 60°	Digits	≥ 80
top- surface	backprinted black		< 6
back- surface			
Roughness, R3z	acc. to ISO 4287/88,	µm	< 0.5
top- surface	Lm 12.5 mm; lc 2.5		< 11
back- surface	mm average over 3-5 measurements		
Optical			
Light Transmission	ISO 13468-2	%	81
300 µm, back- surface			78
300 µm, top- surface			73
500 µm, back-surface			73
500 µm, top-surface			
Haze	ASTM D 1003	%	100
300 µm, back- surface			100
300 µm, top- surface			100
500 µm, back-surface			100
500 µm, top-surface			
Half-Power Angle	following DIN 5036	Degree	29
300 µm, top-surface			41
500 µm, top-surface			



MAKROFOL[®] LM 905 2-4 160009

Typical Properties* (CONT'D)

Property	Test Method	Unit	Value
Mechanical			
Stress at Break	ISO 527-1,-3	MPa	≥ 70
Machine Direction			≥ 70
Transverse Direction			≥ 70
Strain at Break	ISO 527-1,-3	%	≥ 115
Machine Direction			≥ 115
Transverse Direction			≥ 115
Tensile Modulus	ISO 527-1,-3	MPa	≥ 2,400
Machine Direction			≥ 2,300
Transverse Direction			≥ 2,300
Thermal			
Relative Temperature Index	UL 746 B	°C	80
Electrical			
Surface Resistivity	following DIN IEC 60093	Ohm	10 ¹⁶
Other			
Water Absorption	following ISO 62	%	0.2

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

CURBELL
PLASTICS

1-888-CURBELL

www.curbellplastics.com

Curbell Plastics is a proud supplier of Covestro materials



MAKROFOL[®] LM 905 2-4 160009

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.

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

Note: This is a developmental product that is furnished for research and development purposes only. The information contained herein is merely preliminary data because testing as to properties is not final. Further information including data that could change or add hazards associated with use, may be developed. Such information may be needed to evaluate and/or use this product properly. The purchaser/user agrees that: use is undertaken at the purchaser's/user's sole risk, that the material is furnished "as is, with all faults," without any warranty or guarantee; and that Bayer Covestro LLC shall not be liable for any damages, of whatever nature, arising out of the purchaser's/user's receipt and/or use of the material. Commercialization and continued supply are not assured. The purchaser/user agrees that Bayer Covestro LLC reserves the right to discontinue supply at any time.

Editor: Covestro LLC
1 Covestro Circle
Pittsburgh, Pennsylvania 15205
United States
www.covestro.com

Contact:
8 Fairview Way South Deerfield, MA 01371
Tel. 413-665-7016

page 3 of 3

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

Edition 2013-07-26

Product Datasheet