

## Makrofol® DE 1-4 010181

## **Description and Application Information**

Makrofol<sup>®</sup> DE 1-4 010181 is a translucent white colored extrusion film based on Makrolon Polycarbonate. It comprises all of the well known advantages of Poylcarbonate such as excellent mechanical and optical properties. The surface combination of Makrofol<sup>®</sup> DE 1-4 010181 is gloss/very fine matte. It stands out due to its good printing quality and formability. It is suitable for High Pressure Forming process (HPF) and Film-Insert-Molding process (FIM). Makrofol<sup>®</sup> DE 1-4 010181 is available in standard thickness of 500  $\mu$ m. Typical applications are illuminated front panels, lables and control elements of electronic devices (white goods).

## Guide data\*

General properties			
Property	Value	Unit of measurement	Method
Density	1,2	g/cm³	ISO 1183, 20°C method C
Thickness	500	μm	ISO 4593
Gloss, 60° 1-side	≥ 99	Digits	ISO 2813
Gloss, 60° 4-side	≤ 12	Digits	ISO 2813
Roughness R3z 1-side	≤ 0,5	μm	following ISO 4287/88
Roughness R3z 4-side	≤ 11	μm	following ISO 4287/88
Mechanical properties			
Property	Value	Unit of measurement	Method
Tensile Modulus	≥ 2000	MPa	ISO 527-1,-3
Stress at break, parallel	≥ 60	MPa	ISO 527-1,-3
Strain at break, parallel	≥ 100	%	ISO 527-1,-3
Thermal properties			
Property	Value	Unit of measurement	Method
Shrinkage, parallel 130°C, 1 h	≤ 0,5	%	following IEC 60674-2

<sup>\*</sup> These values provide general information and are not part of the product specification.



