

# Makrofol® DE 1-4 900029

## Description and Application Information

Makrofol® DE 1-4 900029 is an opaque, black colored extrusion film based on Makrolon Polycarbonate. It comprises all of the well known advantages of Polycarbonate such as excellent mechanical properties.

The surface combination of Makrofol® DE 1-4 900029 is onesided gloss (1), onesided very fine matte (4).

It stands out due to its good printing quality and formability. It is suitable for High Pressure Forming process (HPF). Makrofol® DE 1-4 900029 is available in various standard thicknesses from 100 to 500 µm.

## Guide data\*

General properties			
Property	Value	Unit of measurement	Method
Density	1,2	g/cm <sup>3</sup>	ISO 1183, 20°C method C
Thickness	100 - 500	µm	ISO 4593
Gloss, 60° 1-side	≥ 99	Digits	ISO 2813
Gloss, 60° 4-side	≤ 7	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 130°C, 1 h	≤ 0,5	%	following IEC 60674-2
< 250 µm	≤ 0,3		
≥ 250 µm			

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

