+135-3858-6433 (GuangDong)
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SABIC® PP 83MF10

PP IMPACT COPOLYMER

DESCRIPTION

This grade combines a very high impact strength, even at low temperatures, with a high stiffness and moderate flow properties. It is typically used by our customers for injection moulding of technical components and containers exposed to heavy loads and needing a high toughness. It is typically used by our customers for extrusion applications like thin sheet, corrugated board and profiles.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230 °C and 2.16 kg	1.8	dg/min	ISO 1133
Density	905	kg/m³	ASTM D1505
FORMULATION			
UV stabilized	☐	-	-
Anti static agent	☐	-	-
Nucleating agent	☐	-	-
MECHANICAL PROPERTIES			
Tensile test			
strain at yield [1]	5	%	ISO 527-2 1A
stress at yield	23	MPa	ISO 527-2 1A
tensile modulus [2]	1200	MPa	ISO 527-2 1A
Izod impact notched			
at -20 °C	12	kJ/m²	ISO 180/1A
Izod impact notched			
at 23 °C	No Break	kJ/m²	ISO 180/1A
Charpy Impact Strength Notched			
at -20 °C	10	kJ/m²	ISO 179/1eA
at 0 °C	40	kJ/m²	ISO 179/1eA
at 23 °C	75	kJ/m²	ISO 179/1eA
Charpy impact unnotched			
at 23 °C	No Break	kJ/m²	ISO 179/1eU
Hardness Shore D	61	-	ISO 868
THERMAL PROPERTIES			
Heat deflection temperature [3]			
at 1.80 MPa (HDT/A)	55	°C	ISO 75
at 0.45 MPa (HDT/B)	85	°C	ISO 75
Vicat Softening Temperature [4]			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
at 10 N (VST/A)	148	°C	ISO 306
at 50 N (VST/B)	68	°C	ISO 306

(1) Speed of testing: 50 mm/min
(2) Speed of testing: 1 mm/min
(3) Flat wise (testbar 80*10*4mm)
(4) Temperature rate: 120°C/h