







# 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.

Health, Safety and Food Contact regulations: Safety Data Sheets (SDS) and Product Safety declarations are available on our Internet site

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical / medical applications.

This grade material is UL registered under File E111275 (www.ul.com). IMDS ID: 80775790

### TYPICAL PROPERTY VALUES

Revision 20220725

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
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 <sup>(1)</sup>	5	%	ISO 527-2 1A
stress at yield	23	MPa	ISO 527-2 1A
tensile modulus <sup>(2)</sup>	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)			
at 10 N (VST/A)	148	°C	ISO 306
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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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

#### STORAGE AND HANDLING

Avoid prolonged storage in open sunlight, high temperatures (<50 °C) and /or high humidity as this could well speed up alteration and consequently loss of quality of the material and /or its packaging. Keep material completely dry for good processing.

#### **DISCLAIMER**

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