

# 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 <http://www.SABIC.com>

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](http://www.ul.com)).  
IMDS ID: 80775790

### TYPICAL PROPERTY VALUES

Revision 20220725

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
at 230 °C and 2.16 kg	1.8	dg/min	ISO 1133
<b>Density</b>	905	kg/m <sup>3</sup>	ASTM D1505
<b>FORMULATION</b>			
<b>UV stabilized</b>	<input type="checkbox"/>	-	-
<b>Anti static agent</b>	<input type="checkbox"/>	-	-
<b>Nucleating agent</b>	<input type="checkbox"/>	-	-
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile test</b>			
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
<b>Izod impact notched</b>			
at -20 °C	12	kJ/m <sup>2</sup>	ISO 180/1A
<b>Izod impact notched</b>			
at 23 °C	No Break	kJ/m <sup>2</sup>	ISO 180/1A
<b>Charpy Impact Strength Notched</b>			
at -20 °C	10	kJ/m <sup>2</sup>	ISO 179/1eA
at 0 °C	40	kJ/m <sup>2</sup>	ISO 179/1eA
at 23 °C	75	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Charpy impact unnotched</b>			
at 23 °C	No Break	kJ/m <sup>2</sup>	ISO 179/1eU
<b>Hardness Shore D</b>	61	-	ISO 868
<b>THERMAL PROPERTIES</b>			
<b>Heat deflection temperature <sup>(3)</sup></b>			
at 1.80 MPa (HDT/A)	55	°C	ISO 75
at 0.45 MPa (HDT/B)	85	°C	ISO 75
<b>Vicat Softening Temperature <sup>(4)</sup></b>			
at 10 N (VST/A)	148	°C	ISO 306

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.

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