

SABIC® PP 83EK10

PP IMPACT COPOLYMER

DESCRIPTION

This grade combines a very high impact strength, even at low temperatures, with a high stiffness and low flow properties. It is typically used for extrusion of flat sheets, corrugated board and corrugated pipes.

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). IMDS 80775790

TYPICAL PROPERTY VALUES

Revision 20260216

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230 °C and 2.16 kg	1.2	dg/min	ISO 1133
Density	905	kg/m³	ASTM D1505
FORMULATION			
Anti static agent	☐	-	-
Nucleating agent	☒	-	-
MECHANICAL PROPERTIES			
Tensile test			
stress at yield	23	MPa	ISO 527-2 1A
tensile modulus ⁽¹⁾	1250	MPa	ISO 527-2 1A
strain at yield ⁽²⁾	5	%	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 23 °C	80	kJ/m²	ISO 179/1eA
at 0 °C	60	kJ/m²	ISO 179/1eA
Charpy impact unnotched			
at 23 °C	No Break	kJ/m²	ISO 179/1eU
Hardness Shore D	63	-	ISO 868
THERMAL PROPERTIES			
Heat deflection temperature ⁽³⁾			
at 0.45 MPa (HDT/B)	85	°C	ISO 75
at 1.80 MPa (HDT/A)	55	°C	ISO 75
Vicat Softening Temperature ⁽⁴⁾			
at 10 N (VST/A)	148	°C	ISO 306
at 50 N (VST/B)	68	°C	ISO 306

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CHEMISTRY THAT MATTERS™



- (1) Speed of testing: 1 mm/min
- (2) Speed of testing: 50 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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