SABIC® PP RELY 71EK71PS

PP IMPACT COPOLYMER

DESCRIPTION

This impact copolymer has a high molecular weight and is provided with a long-term heat stabilisation package. It exhibits high stiffness in combination with very high impact strength even at low temperatures. This material is typically used for extrusion of sewage pipe applications and can also be typically used for blow-moulding of large containers and sheet extrusion.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230 °C and 2.16 kg	0.30	dg/min	ISO 1133
Density	905	kg/m³	ASTM D1505
FORMULATION			
Anti static agent	☐	-	-
Nucleating agent	☑	-	-
MECHANICAL PROPERTIES			
Tensile test			
stress at yield	28	MPa	ISO 527-2 1A
tensile modulus [1]	1450	MPa	ISO 527-2 1A
strain at yield [2]	8	%	ISO 527-2 1A
Izod impact notched			
at 0 °C	35	kJ/m²	ISO 180/1A
at -20 °C	6	kJ/m²	ISO 180/1A
Izod impact notched			
at 23 °C	No Break	kJ/m²	ISO 180/1A
Charpy Impact Strength Notched			
at 23 °C	80	kJ/m²	ISO 179/1eA
at 0 °C	20	kJ/m²	ISO 179/1eA
at -20 °C	7	kJ/m²	ISO 179/1eA
Charpy impact unnotched			
at 23 °C	No Break	kJ/m²	ISO 179/1eU
Hardness Shore D	66	-	ISO 868
THERMAL PROPERTIES			
Heat deflection temperature [3]			
at 0.45 MPa (HDT/B)	95	°C	ISO 75
at 1.80 MPa (HDT/A)	55	°C	ISO 75
Vicat Softening Temperature [4]			
at 10 N (VST/A)	156	°C	ISO 306

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
at 50 N (VST/B)	81	°C	ISO 306
OIT 200°C	>100	Minutes	EN 728

(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