SABIC® PP PHC31-81

PP IMPACT COPOLYMER

DESCRIPTION

SABIC® PP PHC31-81 is a grade which combines high stiffness with good impact strength. Its excellent flow properties and narrow molecular weight distribution permits fast cycle-times and injection moulding of articles demanding low warpage and high dimensional stability. This grade is formulated with a combined processing and UV-stabilisation package. Typical applications are automotive components. It is also available in a general purpose additive package.

SABIC® PP PHC31-81 is a designated automotive grade.

IMDS ID: 80775790

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230 °C and 2.16 kg	15	dg/min	ISO 1133
Density	905	kg/m³	ISO 1183
Mould shrinkage			
24 hours after injection moulding (1)	1.6	%	SABIC method
FORMULATION			
UV stabilized	☑	-	-
Anti static agent	☐	-	-
Nucleating agent	☐	-	-
MECHANICAL PROPERTIES			
Tensile test			
stress at yield	25	MPa	ISO 527-2 1A
strain at yield (2)	5	%	ISO 527-2 1A
tensile modulus (3)	1300	MPa	ISO 527-2 1A
Izod impact notched			
at 23 °C	11	kJ/m²	ISO 180/1A
at 0 °C	7	kJ/m²	ISO 180/1A
at -20 °C	5	kJ/m²	ISO 180/1A
Charpy Impact Strength Notched			
at 23 °C	12.5	kJ/m²	ISO 179/1eA
at 0 °C	8	kJ/m²	ISO 179/1eA
at -20 °C	5	kJ/m²	ISO 179/1eA
Hardness Shore D	65	-	ISO 868
THERMAL PROPERTIES			
Heat deflection temperature (4)			
at 1.80 MPa (HDT/A)	55	°C	ISO 75
at 0.45 MPa (HDT/B)	80	°C	ISO 75
Vicat Softening Temperature (5)			
at 10 N (VST/A)	149	°C	ISO 306

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
at 50 N (VST/B)	74	°C	ISO 306

(1) All measurements on injection molded samples.
(2) Speed of testing: 50 mm/min
(3) Speed of testing: 1 mm/min
(4) Flat wise (testbar 80*10*4mm)
(5) Temperature rate: 120°C/h

QUALITY

SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO9001.

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.