



SABIC® PP PHC31-81

PP impact for Automotive injection moulding

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 values

Revision 20140109

Properties	Unit (Si)	Values	Test methods
Polymer properties			
Melt flow rate (MFR) at 230 °C and 2.16 kg	dg/min	15	ISO 1133
Density	kg/m ³	905	ISO 1183
Mould shrinkage 24 hours after injection moulding ¹⁾	%	1.6	SABIC method
Formulation			
UV stabilized	-	Yes	-
Anti static agent	-	No	-
Nucleating agent	-	No	-
Mechanical properties			
Tensile test			ISO 527-2 1A
stress at yield ²⁾	MPa	25	
strain at yield ²⁾	%	5	
tensile modulus ³⁾	MPa	1300	
Izod impact notched			ISO 180/1A
at 23 °C	kJ/m ²	11	
at 0 °C	kJ/m ²	7	
at -20 °C	kJ/m ²	5	
Charpy impact notched			ISO 179/1eA
at 23 °C	kJ/m ²	12.5	
at 0 °C	kJ/m ²	8	
at -20 °C	kJ/m ²	5	
Hardness Shore D	-	65	ISO 868
Thermal properties			
Heat deflection temperature ⁴⁾			ISO 75
at 1.80 MPa (HDT/A)	°C	55	
at 0.45 MPa (HDT/B)	°C	80	
Vicat softening temperature ⁵⁾			ISO 306
at 10 N (VST/A)	°C	149	
at 50 N (VST/B)	°C	74	

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



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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.

Disclaimer. The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

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