

# SABIC® PP PHC31

# PP IMPACT COPOLYMER

## **DESCRIPTION**

SABIC® PP PHC31 combines high stiffness with good impact strength. Its excellent flow properties and narrow molecular weight distribution allows fast cycle-times and injection moulding of articles demanding low warpage and high dimensional stability. Typical applications are pails, containers, crates & boxes and automotive components.

#### Health, Safety and Food Contact regulations:

Material Safety Data Sheets (MSDS) 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 ID: 80775790.

## **TYPICAL PROPERTY VALUES**

Revision 20240709

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230 °C and 2.16 kg	15	dg/min	ISO 1133
Density	905	kg/m³	ASTM D1505
FORMULATION			
Anti static agent		-	-
Nucleating agent		-	-
MECHANICAL PROPERTIES			
Tensile test			
stress at yield	25	MPa	ISO 527-2 1A
tensile modulus <sup>(1)</sup>	1300	MPa	ISO 527-2 1A
strain at yield <sup>(2)</sup>	5	%	ISO 527-2 1A
Izod impact notched			
at 0 °C	7	$kJ/m^2$	ISO 180/1A
at 23 °C	11	kJ/m²	ISO 180/1A
at -20 °C	5	kJ/m²	ISO 180/1A
Charpy Impact Strength Notched			
at 0 °C	8	kJ/m²	ISO 179/1eA
at -20 °C	5	kJ/m²	ISO 179/1eA
at 23 °C	12.5	kJ/m²	ISO 179/1eA
Hardness Shore D	64	-	ISO 868
THERMAL PROPERTIES			
Heat deflection temperature <sup>(3)</sup>			
at 1.80 MPa (HDT/A)	55	°C	ISO 75
at 0.45 MPa (HDT/B)	80	°C	ISO 75
Vicat Softening Temperature <sup>(4)</sup>			
at 10 N (VST/A)	149	°C	ISO 306
at 50 N (VST/B)	74	°C	ISO 306



- (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.

## **DISCLAIMER**

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