

SABIC® PP PHC31

Polypropylene Impact Copolymer

Saudi Basic Industries Corporation (SABIC)

Message:

This grade 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.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/medical applications.

General Information			
UL YellowCard	E111275-219030		
Features	Block Copolymer		
	Fast Molding Cycle		
	Good Dimensional Stability		
	Good Flow		
	Good Impact Resistance		
	High Stiffness		
	Low Warpage		
	Narrow Molecular Weight Distribution		
Uses	Automotive Applications		
	Containers		
	Crates		
	Pails		
UL File Number	E111275		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.905	g/cm ³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	15	g/10 min	ASTM D1238, ISO 1133
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	92		ASTM D785
Shore Hardness (Shore D)	65		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
1% Secant ¹	1350	MPa	ASTM D638
--	1300	MPa	ISO 527-2/1A/1
Tensile Strength			
Yield ²	25.0	MPa	ASTM D638

Yield	25.0	MPa	ISO 527-2/1A/50
Tensile Elongation			
Yield ³	5.0	%	ASTM D638
Yield	5.0	%	ISO 527-2/1A/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-20°C	5.0	kJ/m ²	
0°C	8.0	kJ/m ²	
23°C	13	kJ/m ²	
Notched Izod Impact			
-20°C	50	J/m	ASTM D256A
0°C	75	J/m	ASTM D256A
23°C	100	J/m	ASTM D256A
-20°C	5.0	kJ/m ²	ISO 180/1A
0°C	7.0	kJ/m ²	ISO 180/1A
23°C	11	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	85.0	°C	ASTM D648
0.45 MPa, Unannealed ⁴	80.0	°C	ISO 75-2/Bf
1.8 MPa, Unannealed	60.0	°C	ASTM D648
1.8 MPa, Unannealed ⁵	55.0	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	150	°C	ASTM D1525 ⁶
--	76.0	°C	ASTM D1525 ⁷
--	149	°C	ISO 306/A120
--	74.0	°C	ISO 306/B120
NOTE			
1.	5.0 mm/min		
2.	50 mm/min		
3.	50 mm/min		
4.	testbar 80*10*4mm		
5.	testbar 80*10*4mm		
6.	Rate B (120°C/h), Loading 1 (10 N)		
7.	Rate B (120°C/h), Loading 2 (50 N)		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

