



TotalEnergies

Refining & Chemicals
Polymers

Description

Polypropylene PPC 4640 is a nucleated heterophasic copolymer with a Melt Flow Index of 3.5 g/10 min. Polypropylene PPC 4640 is characterized by good stiffness and remarkable impact resistance coupled with high creep resistance. Polypropylene PPC 4640 has been developed for injection moulding of chair shells, pails, crates and other articles requiring good mechanical properties.

Characteristics

	Method	Unit	Typical Value
Rheological properties			
Melt Flow Index 230°C/2.16 kg	ISO 1133	g/10 min	3.5
Mechanical properties			
Tensile Strength at Yield	ISO 527-2	MPa	27
Elongation at Yield	ISO 527-2	%	6
Tensile modulus	ISO 527-2	MPa	1400
Flexural modulus	ISO 178	MPa	1350
Izod Impact Strength (notched)	ISO 180	kJ/m ²	
at 23°C			25
at -20°C			6
Charpy Impact Strength (notched)	ISO 179	kJ/m ²	
at 23°C			25
at -20°C			7
Hardness Rockwell - R-scale	ISO 2039-2		86
Thermal properties			
Melting Point	ISO 3146	°C	165
Vicat Softening Point	ISO 306	°C	
50N-50°C per hour			70
10N-50°C per hour			140
Heat Deflection Temperature	ISO 752	°C	
1.80 MPa - 120°C per hour			53
0.45 MPa - 120°C per hour			95
Other physical properties			
Density	ISO 1183	g/cm ³	0.905
Bulk Density	ISO 1183	g/cm ³	0.525

Polypropylene

Handling and storage

Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within one year after delivery provided storage conditions are used as given in the SDS of our product. SDS may be obtained from the website: www.polymers.totalenergies.com.

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