



**TotalEnergies**

Refining & Chemicals  
Polymers

## Polypropylene PPC 4640

Technical data sheet  
Polypropylene – Heterophasic Copolymer  
Produced in Europe

### 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
<b>Rheological properties</b>			
Melt Flow Index 230°C/2.16 kg	ISO 1133	g/10 min	3.5
<b>Mechanical properties</b>			
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 <sup>2</sup>	
at 23°C			25
at -20°C			6
Charpy Impact Strength (notched)	ISO 179	kJ/m <sup>2</sup>	
at 23°C			25
at -20°C			7
Hardness Rockwell - R-scale	ISO 2039-2		86
<b>Thermal properties</b>			
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
<b>Other physical properties</b>			
Density	ISO 1183	g/cm <sup>3</sup>	0.905
Bulk Density	ISO 1183	g/cm <sup>3</sup>	0.525

### 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](http://www.polymers.totalenergies.com).

Information contained in this publication is true and accurate at the time of publication and to the best of our knowledge. The nominal values stated herein are obtained using laboratory test specimens. These are typical values not to be construed as specification limits. Before using one of the products mentioned herein, customers and other users should take all care in determining the suitability of such product for the intended use. Unless specifically indicated, the products mentioned herein are not suitable for applications in the pharmaceutical or medical sector. The Companies within TotalEnergies Petrochemicals do not accept any liability whatsoever arising from the use of this information or the use, application or processing of any product described herein. No information contained in this publication can be considered as a suggestion to infringe patents. The Companies disclaim any liability that may be claimed for infringement or alleged infringement of patents.