



**TotalEnergies**

Refining & Chemicals  
Polymers

**Description**

Polypropylene PPC 3645 polypropylene is a nucleated heterophasic copolymer with a Melt Flow Index of 1.3 g/10 min.  
Polypropylene PPC 3645 polypropylene is characterized by improved stiffness, creep resistance and high impact resistance.  
Polypropylene PPC 3645 has been developed specifically for the extrusion of corrugated cardboard, corrugated and twin walled pipes, conduit pipe and other extrusion applications.

**Characteristics**

	Method	Unit	Typical Value
<b>Rheological properties</b>			
Melt Flow Index 230°C/2.16 kg	ISO 1133	g/10 min	1.3
<b>Mechanical properties</b>			
Tensile Strength at Yield	ISO 527-2	MPa	29
Elongation at Yield	ISO 527-2	%	6
Tensile modulus	ISO 527-2	MPa	1500
Flexural modulus	ISO 178	MPa	1400
Izod Impact Strength (notched)	ISO 180	kJ/m <sup>2</sup>	
at 23°C			>50
at -20°C			9
Charpy Impact Strength (notched)	ISO 179	kJ/m <sup>2</sup>	
at 23°C			>50
at -20°C			10
Hardness Rockwell - R-scale	ISO 2039-2		82
<b>Thermal properties</b>			
Melting Point	ISO 3146	°C	165
Vicat Softening Point	ISO 306	°C	
50N-50°C per hour			75
10N-50°C per hour			151
Heat Deflection Temperature	ISO 752	°C	
1.80 MPa - 120°C per hour			54
0.45 MPa - 120°C per hour			92
<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

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](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.