


**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         |

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).

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