

Description

Total Petrochemicals PPC 3660 is a heterophasic copolymer polypropylene with a Melt Flow Index of 1.3 g/min for the cast extrusion of films with superior mechanical properties and retort-able.

Polypropylene PPC 3660 is intended for applications like food packaging, lamination films, stand up pouches, heat-sterilized packaging,...

Characteristics

|                                          | Method     | Unit              | Typical Value |
|------------------------------------------|------------|-------------------|---------------|
| Rheological properties                   |            |                   |               |
| Melt Flow Index 230°C/2.16 kg            | ISO 1133   | g/10 min          | 1.3           |
| Mechanical properties                    |            |                   |               |
| Tensile Strength at Yield                | ISO 527-2  | MPa               | 24            |
| Elongation at Yield                      | ISO 527-2  | %                 | 11            |
| Tensile modulus                          | ISO 527-2  | MPa               | 1300          |
| Flexural modulus                         | ISO 178    | MPa               | 1200          |
| Izod Impact Strength (notched)           | ISO 180    | kJ/m <sup>2</sup> |               |
| At 23°C                                  |            |                   | >50           |
| At (-20)°C                               |            |                   | 7             |
| Charpy Impact Strength (notched) at 23°C | ISO 179    | kJ/m <sup>2</sup> |               |
| At 23°C                                  |            |                   | >50           |
| At (-20)°C                               |            |                   | 8             |
| Hardness Rockwell - R-scale              | ISO 2039-2 |                   | 77            |
| 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                        |            |                   | 147           |
| Heat Deflection Temperature              | ISO 752    | °C                |               |
| 1.80 MPa – 120°C per hour                |            |                   | 50            |
| 0.45 MPa – 120°C per hour                |            |                   | 90            |
| Other physical properties                |            |                   |               |
| 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.totalpetrochemicals.biz](http://www.totalpetrochemicals.biz)

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Additional Properties: typical film properties

|                                       | Method      | Unit | Typical Value |
|---------------------------------------|-------------|------|---------------|
| Optical properties                    |             |      |               |
| Gloss 45°                             | ASTM D 2457 |      | 15            |
| Haze                                  | ISO 14782   | %    | 65            |
| Mechanical properties                 |             |      |               |
| Tensile Strength at Yield MD / TD *   | ISO 527-3   | MPa  | 20 / 18       |
| Tensile Strength at Break MD / TD *   | ISO 527-3   | MPa  | 60 / 34       |
| Tensile Elongation at Break MD / TD * | ISO 527-3   | %    | 500 / 600     |
| Dart Impact                           | ISO 7765-1  | g    | 580           |
| Elmendorf MD / TD *                   | ISO 6383-2  | N/mm | 11 / 235      |

\* MD : Machine Direction    TD : Transverse Direction

Properties measured on a 50µm thick film produced on a cast film line following TOTAL internal conditions.  
When considering these film properties, it should be taken into consideration that film properties are strongly dependent from processing conditions.

Polypropylene

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