



**TotalEnergies**

TotalEnergies Petrochemicals & Refining USA, Inc.  
Polymers Americas

### Polypropylene 3740WR

Technical Data Sheet  
Polypropylene – Homopolymer  
Produced in the United States

#### Description

**Polypropylene 3740WR** exhibits exceptionally easy flow characteristics.

**FDA:** 3740WR complies with all applicable FDA and USDA regulations and may be used under these provisions for food contact and packaging.

**Applications:** 3740WR is recommended for injection molding medical applications requiring high stiffness and good gamma radiation stability up to 50 kGy.

**Processing:** 3740WR resin processes on conventional injection molding equipment with typical melt temperatures of 350°F-450°F (177°C-232°C).

#### Characteristics

|                                            | Method                  | Unit                                         | Typical Value   |
|--------------------------------------------|-------------------------|----------------------------------------------|-----------------|
| <b>Rheological Properties</b>              |                         |                                              |                 |
| Melt Flow                                  | D-1238<br>Condition "L" | g/10 min                                     | 20              |
| <b>Mechanical Properties</b>               |                         |                                              |                 |
| Tensile Strength at Yield                  | D-638                   | psi (MPa)                                    | 5400 (37)       |
| Elongation at Yield                        | D-638                   | %                                            | 7               |
| Tensile Modulus                            | D-638                   | psi (MPa)                                    | 240,000 (1,655) |
| Flexural Modulus                           | D-790                   | psi (MPa)                                    | 250,000 (1,725) |
| Izod Impact Notched @ 73°F                 | D-256A                  | ft.-lbs/in. (J/m)                            | 0.3 (16)        |
| Drop Impact, 0.125"                        | API <sup>(3)</sup>      | Plaques, in.lbs. (J)                         | 5 (0.57)        |
| Hardness                                   | D-1706                  | Shore D                                      | 75              |
| <b>Thermal Properties<sup>(1)(2)</sup></b> |                         |                                              |                 |
| Melting Point                              | DSC                     | °F (°C)                                      | 329 (165)       |
| Heat Deflection                            | D-648                   | °F @ 66 psi<br>°C @ 4.64 kGy/cm <sup>2</sup> | 240<br>116      |
| <b>Other Physical Properties</b>           |                         |                                              |                 |
| Density                                    | D-1505                  | g/cc                                         | 0.900           |

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.  
(2) MP determined with a DSC-2 Differential Scanning Calorimeter. Test procedure available upon request.  
(3) Test procedure available upon request.

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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of TotalEnergies products must be guided by the users own methods for selection of proper formulation. TotalEnergies Petrochemicals & Refining USA Inc. disclaims any responsibility for misuse or misapplication of its products. TotalEnergies MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TotalEnergies' liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.

Polypropylene

