



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                   | 240             |
|   |                         | °C @ 4.64 kGy/cm <sup>2</sup> | 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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