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
Rheological Properties			
Melt Flow	D-1238 Condition "L"	g/10 min	20
Mechanical Properties			
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 @ 73ºF	D-256A	ft-lb/in (J/m)	0.3 (16)
Drop Impact, 0.125"	API (3)	Plaques, in.lbs. (J)	5 (0.57)
Hardness	D-1706	Shore D	75
Thermal Properties(1)			
Melting Point	DSC(2)	°F (°C)	329 (165)
Heat Deflection	D-648	°F @ 66 psi °C @ 4.64 kGy/cm^2	240 116
Other Physical Properties			
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.

Rev: Feb 2026

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Polypropylene