TotalEnergies

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Polypropylene 3727W

Technical Data Sheet
Polypropylene – Random Copolymer
Produced in the United States

Description

Polypropylene 3727W strikes an optimum balance between excellent mechanical properties (tensile, flex and impact) and processability making it a superior molding grade for cap and closure applications.

Impact Strength. 3727W offers improved impact strength.

Nucleation. 3727W is formulated to provide fast cycle time and improve contact clarity in thin wall multi-cavity molds.

Regulatory. 3727W has passed USP Class VI testing, and all ingredients meet the chemical registration requirements of TSCA (U.S.) and DSL (Canada). TOTAL Polypropylene 3727W complies with all applicable FDA regulations for food contact applications.

Recommended Application. 3727W is recommended for large thin wall parts, caps and closures.

Processing. 3727W resin processes on conventional injection molding equipment with typical melt temperatures of 390°F-450°F (200°C-232°C).

Characteristics

	Method	Unit	Typical Value
Rheological Properties			
Melt Flow	D-1238 Condition "L"	g/10 min	20
Mechanical Properties			
Tensile Strength @ Yield	D-638	psi (MPa)	4,800 (35)
Tensile Elongation @ Yield		%	8
Tensile Modulus	D-638	psi (MPa)	180,000 (1,240)
Flexural Modulus	D-790	psi (MPa)	190,000 (1,310)
Izod Impact Notched @ 73°F	D-256A	ft-lb/in (J/m)	1.0 (53)
Drop Impact, 0.125"	API (3)	Plaques in.lbs. (J)	160 (18)
Thermal Properties(1)(2)(3)			
Melting Point	DSC(2)	°F (°C)	316 (158)
Heat Deflection	D-648	°F @ 66 psi °C @ 4.64 kg/cm^2	220 105
Other Physical Properties			
Density	D-1505	g/cc	0.905

(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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