Polypropylene 3727WZ

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

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Description

Polypropylene 3727WZ 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: 3727WZ offers improved impact strength.

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

Antistat: 3727WZ contains an antistat to help protect molded parts from dust accumulation.

FDA: 3727WZ complies with all applicable FDA regulations for food contact applications.

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

Processing: 3727WZ 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	D-638	psi (MPa)	4800 (35)
Elongation at Yield		%	12
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.-lbs/in. (J/m)	1.0 (53)
Drop Impact, 0.125*	API (3)	Plaques in.lbs. (J)	160 (18)
Thermal Properties(1)(2)			
Melting Point	DSC	°F (°C)	316 (158)
Heat Deflection	D-648	°F @ 66 psi °C @ 4.64 kg/cm^2	220 105
Vicat softening Point,	D-1525	°C	140
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.

Rev: Sept 2021

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