

TechResin[®] 1021

Medium Impact Copolymer for Injection Molding

TechResin[®] 1021 is a medium impact copolymer of polypropylene for use in injection molding applications including battery cases and lids. It is characterized by easy mold flow, physical property balance and excellent dimensional stability. It contains a unique combination of stabilizers, which provides excellent processing and usage performance.

TechResin[®] 1021 meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles and components of articles intended for direct food contact.

This material is free of animal-derived content.

Typical Properties of this Commercial Grade

Property	Test Method	Typical Values	
		English	SI
Melt Flow Rate, I ₂ @ 230°C	ASTM D1238	10 g/10 min	10 g/10 min
Density	ASTM D1505	0.9 g/cm ³	0.9 g/cm ³
Tensile Strength at Yield (50 mm/min)	ASTM D638	3,500 psi	24 MPa
Elongation at Yield (50 mm/min)	ASTM D638	7 %	7 %
Flexural Modulus (1.3 mm/min), 1% Secant	ASTM D790	150,000 psi	1034 MPa
Notched Izod Impact Strength @ 73°F	ASTM D256A	2.1 ft-lb/in	112 J/m
Notched Izod Impact Strength @ 32°F	ASTM D256A	1.5 ft-lb/in	80 J/m
Rockwell Hardness	ASTM D785	95 R Scale	95 R Scale
Heat Deflection Temperature @ 66 psi	ASTM D648	185 °F	85 °C

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