

TechResin® 3509

TechResin® 3509 is a high flow rate, high clarity random copolymer having a moderate level of antistat. In addition to clarity, its benefits include rapid molding cycles and good impact at room and refrigerator temperatures. It meets the requirements of the U.S. Food and Drug Administration, as specified in 21 CFR 177.1520. Typical applications include thin-wall rigid packaging, consumer products, housewares and medical items.

Typical Properties

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.904 g/cc	D792
Melt Flow Rate 230°C/2.16 kg	—	35 g/10 min	D1238
Injection Molded Sample			
Tensile Strength (2 in/min)			D638
@ Yield	4,300 psi	29.6 MPa	
@ Break	2,560 psi	17.6 MPa	
Elongation (2 in/min)			D638
@ Yield	13.7 %	13.7%	
@ Break	>500%	>500%	
Flexural Modulus			D790A
1% Secant	158,500 psi	1,093 MPa	
Notched Izod Impact Strength			D256
@ 23 C	0.88 ft-lbf/in	4.60 kJ/m ²	
@ 4 C Hardness	0.57 ft-lbf/in	3.00 kJ/m ²	
Rockwell R			D785
Vicat Softening Point	84	84	
Deflection Temperature	267 F	130.5 C	D1525
@ 66 psi (455 kPa)			D648
Haze, @ 23°C, 50-mil (1.3mm) plaque,	181 F	83 C	
% Diffuse Transmittance			D1003
Gloss at 60° angle	14 %	14 % 97.9%	D2457

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