

R01C-01 Polypropylene Random Copolymer

R01C-01 is a low melt flow rate high clarity nucleated random copolymer designed for extruded sheet and profiles, including blow molding and thermoformed packaging. End-use applications that require good see-through clarity combined with good heat resistance and refrigerator temperature impact properties can benefit from using R01C-01. This material meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.903 g/cc	D792
Melt Flow Rate 230°C/2.16 kg	—	1.9 g/10 min	D1238
Injection Molded Sample			
Tensile Strength (2 in./min)			D638
@ Yield	4,270 psi	29.4 MPa	
@ Break	2,740 psi	18.9 MPa	
Elongation (2 in./min)			D638
@ Yield	13.4 %	13.4 %	
@ Break	165 %	165 %	
Flexural Modulus			D790A
1% Secant	158,670 psi	1,094 MPa	
Notched Izod Impact Strength			D256
@ 23 C	6.4 ft.-lbf/in - partial failure	33.4 kJ/m ²	
@ 4 C	0.5 ft.-lbf/in - complete failure	2.6 kJ/m ²	
Hardness			D785
Rockwell R	81	81	
Vicat Softening Point	271 F	133 C	D1525
Deflection Temperature			D648
@ 66 psi (455 kPa)	190 F	88 C	
Haze, @ 23°C, 50-mil (1.3mm) plaque,			D1003
% Diffuse Transmittance	—	16	
Gloss Units, 60° angle	—	96.5	D2457

¹ Typical properties will vary and are not to be used for specifications.