

H53N-00 Polypropylene Homopolymer

H53N-00 is a high flow rate nucleated and lightly lubricated homopolymer polypropylene designed for high-speed injection molding of thin-walled parts requiring good stiffness and fast cycle times. Typical applications are: media packaging, consumer products, housewares, and thin-wall rigid packaging and food service items. This grade meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520.

Typical Properties¹

English Units	Values		ASTM
	SI Units	Method	
Resin			
Density	—	0.914 g/cc	D792
Melt Flow Rate 230°C/2.16 kg	—	53 g/10 min	D1238
Injection Molded Samples			
Tensile Strength (2 in/min)			D638
@ Yield	5,517 psi	38.1 MPa	
@ Break	3,993 psi	27.5 MPa	
Elongation (2 in/min)			D638
@ Yield	8.5 %	8.5 %	
@ Break	19.3 %	19.3 %	
Flexural Modulus			D790A
1% Secant	259,000 psi	1,740 MPa	
Notched Izod Impact Strength			D256
@ 23 C	0.50 ft-lbf/in	2.61 kJ/m ²	
Hardness			D785
Rockwell R	107	107	
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	237 F	114 C	
Haze @ 23°C, 50-mil (1.3mm) plaque			D1003
% Diffuse Transmittance	54 %	54 %	
Gloss at 60 ° angle	92	92	D2457
Shrinkage at 23°C, in/in	MD: 1.53%		D955
	TD: 1.71%		

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