

H05H-01 Polypropylene Homopolymer

Grade H05H-01 is a homopolymer polypropylene designed for use in injection molding applications requiring high temperature resistance. H05H-01 has excellent long-term heat aging stability and superior extraction resistance in hot aqueous solutions, making it an excellent candidate for use in washing machines, dishwashers, coffee makers, other appliances, and automotive applications. This grade has been recognized by UL for sustained use at 130 C, meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520 and is Drug Master File listed. This product is not recommended for taste or odor sensitive applications.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.911 g/cc	D792
Melt Flow Rate 230°C/2.16 kg	—	5.1 g/10 min	D1238
Injection Molded Samples			
Tensile Strength (2 in/min)			D638
@ Yield	5,350 psi	36.9 MPa	
@ Break	2,600 psi	17.9 MPa	
Elongation (2 in/min)			D638
@ Yield	—	9.2 %	
@ Break	—	142 %	
Flexural Modulus			D790A
1% Secant	249,000 psi	1,710 MPa	
Notched Izod Impact Strength			D256
@ 23 C	0.76 ft-lbf/in	4.0 kJ/m ²	
Hardness			D785
Rockwell R	—	103	
Deflection Temperature			D648
@ 66 psi (455 kPa)	220 F	104 C	
Haze @ 23°C, 50-mil (1.3mm) plaque			D1003
% Diffuse Transmittance	—	73%	
Gloss at 60° angle	—	93	D2457
UL Recognition (3.0 mm thickness)			UL94
Relative Temperature Index	266 F	130 C	
Flammability Classification	—	HB	

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