

# N05U-00 Polypropylene Impact Copolymer

N05U-00 is an extrusion-grade nucleated impact copolymer polypropylene resin designed for fiber optic buffer tube applications in the protection of glass fibers. N05U-00 has an excellent impact/stiffness property balance and provides the high compression strength required to meet the Bellcore GR-20-CORE standard (Generic Requirements for Optical Fiber and Fiber Optic Cable).

## Typical Properties<sup>1</sup>

	Values		ASTM Method
	English Units	SI Units	
<b>Resin</b>			
Density	—	0.907 g/cc	D792
Melt Flow Rate, 230°C/2.16 kg	—	5 g/10 min	D1238
<b>Injection Molded Sample</b>			
Tensile Strength (2 in/min)			D638
@ Yield	3,900 psi	26.9 MPa	
@ Break	2,785 psi	19.2 MPa	
Elongation (2 in/min)			D638
@ Yield	5.23 %	5.23 %	
@ Break	132 %	132 %	
Flexural Modulus			D790A
1% Secant	216,100 psi	1,490 MPa	
Notched Izod Impact Strength			D256
@ 23 C	7.4 ft-lbf/in	38.7 kJ/m <sup>2</sup>	
@ - 20 C	1.2 ft-lbf/in	6.2 kJ/m <sup>2</sup>	
Hardness			D785
Rockwell R	89	89	
Vicat Softening Point	304 F	151 C	D1525
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	223 F	106 C	
@ 264 psi (1,820 kPa)	135 F	57 C	
Gloss Units, 60° angle		64 %	D2457
Instrumented Impact			D3763
@ 23 C	Ductile	Ductile	
@ -20 C	Ductile	Ductile	

<sup>1</sup> Typical properties will vary and are not to be used for specifications.