

Zytel® 70G30L NC010

NYLON RESIN

Product Description

Zytel® 70G30L NC010 is a 30% glass fiber reinforced polyamide 66 resin for injection molding.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement, 30% Filler by Weight		
Features	• Fatigue Resistant • Fuel Resistant • General Purpose	• Good Chemical Resistance • Good Creep Resistance • Grease Resistant	• High Stiffness • High Strength • Oil Resistant
Uses	• Appliance Components • Automotive Applications	• Electrical/Electronic Applications • Industrial Applications	
RoHS Compliance	• Contact Manufacturer		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >PA66-GF30<		
Resin ID (ISO 1043)	• PA66-GF30		
Product Category	• Glass Reinforced Resins		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.37	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow: 0.0787 in	1.1	--	%	
Flow: 0.0787 in	0.30	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0394 in	6.9	--	%	
Equilibrium, 73°F, 0.0394 in, 50% RH	2.0	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.42E+6	1.04E+6	psi	ISO 527-2
Tensile Stress (Break, 73°F)	28300	18900	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.5	5.0	%	ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	6.2	7.1	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	29	--	ft·lb/in ²	
73°F	38	44	ft·lb/in ²	
Notched Izod Impact Strength (73°F)	5.7	6.7	ft·lb/in ²	ISO 180/1A
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	487	--	°F	
Glass Transition Temperature	176	--	°F	ISO 11357-2
Melting Temperature ²	504	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+13	--	ohm·cm	IEC 60093
Dissipation Factor				IEC 60250
73°F, 100 Hz	0.016	--		
73°F, 1 MHz	0.016	--		

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Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating - UL				UL 94
0.0280 in	HB	--		
0.0591 in	HB	--		
0.118 in	HB	--		
Flammability Classification				IEC 60695-11-10, -20
0.0280 in	HB	--		
0.0591 in	HB	--		
0.118 in	HB	--		
Oxygen Index	24	--	%	ISO 4589-2
UL	Dry	Conditioned	Unit	Test Method
RTI Str				UL 746
0.0280 in	266	--	°F	
0.0591 in	266	--	°F	
0.118 in	266	--	°F	
RTI Imp				UL 746
0.0280 in	248	--	°F	
0.0591 in	248	--	°F	
0.118 in	248	--	°F	
RTI Elec				UL 746
0.0280 in	266	--	°F	
0.0591 in	266	--	°F	
0.118 in	266	--	°F	
Comparative Tracking Index (CTI) (0.118 in)	600	--	V	UL 746
Comparative Tracking Index (CTI) (PLC)				UL 746
0.118 in	PLC 0	--		
Injection		Dry Unit		
Drying Temperature		176 °F		
Drying Time		2.0 to 4.0 hr		
Suggested Max Moisture		< 0.20 %		
Processing (Melt) Temp		545 to 581 °F		
Melt Temperature, Optimum		563 °F		
Mold Temperature		158 to 248 °F		
Mold Temperature, Optimum		212 °F		
Drying Recommended		Yes, if moisture content of resin exceeds recommended level		

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min



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Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.

ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.

Test temperatures are 23°C unless otherwise stated.

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