

DuPont™ Zytel®

nylon resin

Zytel® 73G30L NC010

Zytel® 73G30L NC010 is a 30% glass fiber reinforced polyamide 6 resin for injection molding.

Property	Test Method	Units	Value	
			DAM	50%RH
Identification				
Resin Identification	ISO 1043		PA6-GF30	
Part Marking Code	ISO 11469		>PA6-GF30<	
Mechanical				
Stress at Break	ISO 527	MPa (kpsi)	185 (26.8)	115 (16.7)
Strain at Break	ISO 527	%	3.5	6
Tensile Modulus	ISO 527	MPa (kpsi)	9800 (1420)	6000 (870)
Flexural Modulus	ISO 178	MPa (kpsi)	8200 (1190)	
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	-40°C (-40°F)	
			-30°C (-22°F)	21
			23°C (73°F)	23
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	-30°C (-22°F)	84
			23°C (73°F)	97

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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Thermal				
Deflection Temperature 0.45MPa	ISO 75f	°C (°F)	220 (428)	
1.80MPa			210 (410)	
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	221 (430)	
CLTE, Normal -40 - 23°C (-40 - 73°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.71 (0.39)	
23 - 55°C (73 - 130°F)			1.02 (0.57)	
55 - 160°C (130 - 320°F)			1.19 (0.66)	
CLTE, Parallel -40 - 23°C (-40 - 73°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.26 (0.14)	
23 - 55°C (73 - 130°F)			0.14 (0.08)	
55 - 160°C (130 - 320°F)			0.12 (0.07)	
Electrical				
CTI 3.0mm	UL 746A	V	600	
Flammability				
Flammability Classification 1.5mm	IEC 60695-11-10		HB	
Flammability Classification 1.5mm	UL94		HB	
Oxygen Index	ISO 4589-1/-2	%	21	
High Amperage Arc Ignition Resistance 0.75mm	UL 746A	arcs	150	
1.5mm			150	
3.0mm			150	
Hot Wire Ignition 0.75mm	UL 746A	s	11	
1.5mm			36	
3.0mm			148	

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			DAM	50%RH
Temperature Index				
RTI, Electrical 1.5mm	UL 746B	°C	65	
RTI, Impact 1.5mm	UL 746B	°C	65	
RTI, Strength 1.5mm	UL 746B	°C	65	
Other				
Density	ISO 1183	kg/m ³ (g/cm ³)	1360 (1.36)	
Water Absorption	ISO 62, Similar to	%		
Equilibrium 50%RH			1.9	
Saturation, immersed			6.3	
Molding Shrinkage	ISO 294-4	%		
Normal, 2.0mm			0.6	
Parallel, 2.0mm			0.2	
Mold Shrinkage		%		
Flow, 1.6mm (0.062in)			0.2	
Flow, 3.2mm (0.126in)			0.2	
Transverse, 1.6mm (0.062in)			1.0	
Transverse, 3.2mm (0.126in)			1.0	
Processing				
Melt Temperature Range		°C (°F)	260-280 (500-535)	
Melt Temperature Optimum		°C (°F)	270 (520)	
Mold Temperature Range		°C (°F)	70-120 (160-250)	
Mold Temperature Optimum		°C (°F)	100 (210)	
Drying Time, Dehumidified Dryer		h	2-4	
Drying Temperature		°C (°F)	80 (175)	
Processing Moisture Content		%	<0.20	

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