

DuPont™ Zytel®

nylon resin

Zytel® 70G30HSLR NC010

Zytel® 70G30HSLR NC010 is a 30% glass fiber reinforced, heat stabilized, hydrolysis resistant polyamide 66 resin for injection molding.

Property	Test Method	Units	Value	
			DAM	50%RH
Identification				
Resin Identification	ISO 1043		PA66-GF30	
Part Marking Code	ISO 11469		>PA66-GF30<	
Mechanical				
Stress at Break	ISO 527	MPa (kpsi)	195 (28.3)	130 (18.9)
Strain at Break	ISO 527	%	3.3	5
Tensile Modulus	ISO 527	MPa (kpsi)	10000 (1450)	7200 (1045)
Tensile Creep Modulus	ISO 899	MPa (kpsi)		
1h				6800 (990)
1000h				5100 (740)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²		
-30°C (-22°F)			10	10
23°C (73°F)			13	15
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²		
-30°C (-22°F)			70	72
23°C (73°F)			82	92

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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			DAM	50%RH
Thermal				
Deflection Temperature 0.45MPa	ISO 75f	°C (°F)	261 (502)	
1.80MPa			253 (487)	
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	262 (504)	
CLTE, Normal 23 - 55°C (73 - 130°F)	ISO 11359-1/-2	E-4/C (E-4/F)	1.07 (0.11)	
CLTE, Parallel 23 - 55°C (73 - 130°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.22 (0.12)	
Vicat Softening Temperature 50N	ISO 306	°C (°F)	250 (482)	
Electrical				
Surface Resistivity	IEC 60093	ohm	>1E15	1E13
Relative Permittivity	IEC 60250			
1E2 Hz			4.3	10.8
1E6 Hz			4.1	4.6
Volume Resistivity	IEC 60093	ohm m	>1E13	1E9
1.0mm			>1E15	
Dissipation Factor	IEC 60250	E-4		
1E2 Hz			70	4600
1E6 Hz			150	650
Electric Strength	IEC 60243-1	kV/mm (V/mil)		
1.0mm			38 (964)	32 (812)
CTI	UL 746A	V		
3.0mm			400	

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			DAM	50%RH
Flammability				
Flammability Classification 0.75mm	IEC 60695-11-10		HB	
Flammability Classification 0.75mm	UL94		HB	
High Amperage Arc Ignition Resistance 0.75mm	UL 746A	arcs	120	
1.5mm			120	
3.0mm			120	
Hot Wire Ignition 0.75mm	UL 746A	s	7	
1.5mm			7	
3.0mm			60	
Temperature Index				
RTI, Electrical 0.75mm	UL 746B	°C	140	
RTI, Impact 0.75mm	UL 746B	°C	125	
RTI, Strength 0.75mm	UL 746B	°C	140	
Other				
Density	ISO 1183	kg/m ³ (g/cm ³)	1370 (1.37)	
Water Absorption Equilibrium 50%RH	ISO 62, Similar to	%	1.9	
Saturation, immersed			6	
Molding Shrinkage Normal, 2.0mm	ISO 294-4	%	1.1	
Parallel, 2.0mm			0.3	

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			DAM	50%RH
Processing				
Melt Temperature Range		°C (°F)	285-305 (545-580)	
Melt Temperature Optimum		°C (°F)	295 (565)	
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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