

DuPont™ Zytel®

nylon resin

Zytel® 70G25HSLR NC010

Zytel® 70G25HSLR NC010 is a 25% 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-GF25	
Part Marking Code	ISO 11469		>PA66-GF25<	
Mechanical				
Stress at Break	ISO 527	MPa (kpsi)	180 (26.1)	120 (17.4)
Strain at Break	ISO 527	%	3	7
Tensile Modulus	ISO 527	MPa (kpsi)	8400 (1200)	6100 (880)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²		
			-30°C (-22°F)	7
			10	11
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²		
			-30°C (-22°F)	60
			60	80
Thermal				
Deflection Temperature	ISO 75f	°C (°F)		
			0.45MPa	261 (502)
			252 (486)	
Melting Temperature	ISO 11357-1/-3	°C (°F)		
			10°C/min	262 (504)

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				
CLTE, Normal 23 - 55°C (73 - 130°F)	ISO 11359-1/-2	E-4/C (E-4/F)	1.12 (0.63)	
CLTE, Parallel 23 - 55°C (73 - 130°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.33 (0.18)	
Vicat Softening Temperature 50N	ISO 306	°C (°F)	257 (495)	
Electrical				
Relative Permittivity 1E2 Hz	IEC 60250		3.6	
Volume Resistivity	IEC 60093	ohm m	1E13	
Dissipation Factor 1E2 Hz	IEC 60250	E-4	70	
Flammability				
Flammability Classification 1.5mm	IEC 60695-11-10		HB	
Flammability Classification 1.5mm	UL94		HB	
High Amperage Arc Ignition Resistance 1.5mm	UL 746A	arcs	120	
3.0mm			120	
Hot Wire Ignition 1.5mm	UL 746A	s	7	
3.0mm			30	

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			DAM	50%RH
Temperature Index				
RTI, Electrical	UL 746B	°C		
0.71mm			105	
1.5mm			120	
3.0mm			120	
RTI, Impact	UL 746B	°C		
1.5mm			95	
3.0mm			95	
RTI, Strength	UL 746B	°C		
1.5mm			105	
3.0mm			110	
Other				
Density	ISO 1183	kg/m ³ (g/cm ³)	1320 (1.32)	
Water Absorption	ISO 62, Similar to	%		
Equilibrium 50%RH			2	
Saturation, immersed			6.4	
Molding Shrinkage	ISO 294-4	%		
Normal, 2.0mm			1.1	
Parallel, 2.0mm			0.3	
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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