



Zytel®

nylon resin

Zytel® 101F NC010 Lubricated Nylon Resin

Zytel® 101F NC010 is an internally lubricated PA 66 resin that has been developed for fast cycles and high productivity.

Property	Test Method	Units	Value	
			DAM	50%RH
Mechanical				
Tensile Strength	ASTM D 638	MPa (kpsi)	83 (12.0)	64 (9.3)
Tensile Strength at Yield	ASTM D 638	MPa (kpsi)	83 (12.0)	
Elongation at Break	ASTM D 638	%	50	>300
Elongation at Yield	ASTM D 638	%	4	
Poisson's Ratio			0.4	
Flexural Modulus	ASTM D 790	MPa (kpsi)	2800 (410)	1210 (175)
Notched Izod Impact	ASTM D 256	J/m (ft lb/in)	53 (1.0)	105 (2)
Thermal				
Heat Deflection Temperature 0.45MPa (66psi) 1.8MPa (264psi)	ASTM D 648	°C (°F)	210 (410) 65 (149)	
CLTE, Flow	ASTM D 696	E-4/K (E-4/F)	0.7 (0.4)	
Melting Point	ASTM D 3418	°C (°F)	262 (504)	
Electrical				
Surface Resistivity	ASTM D 257	ohm	1 E14	
Volume Resistivity	ASTM D 257	ohm cm	1 E15	
Dielectric Strength, Short Time 3.2mm (0.125in) 1.6mm (0.063in)	ASTM D 149	kV/mm (V/mil)	16.5 (420) 23.2 (590)	
Dielectric Constant 1E2 Hz 1E3 Hz 1E6 Hz	ASTM D 150		4.1 4.0 3.7	
Dissipation Factor 1E2 Hz 1E3 Hz 1E6 Hz	ASTM D 150		0.01 0.02 0.02	
Flammability				
UL94 Rating at Min. Thickness UL94 Min. Thickness Tested	UL94 UL94	mm (in)	V-2 0.71 (0.028)	

Mechanical properties measured at 23°C (73°F) unless otherwise stated.

Contact DuPont for MSDS, general guides and/or additional information about ventilation, handling, purging, drying, etc.

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The data listed here fall within the normal range of product properties but they should not be used to establish specification limits nor used alone as the basis of design.

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For other medical applications, see "DuPont Medical Caution Statement", H-50102.

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Property	Test Method	Units	Value	
			DAM	50%RH
Other				
Water Absorption	ASTM D 570	%		
Immersion 24hr Saturation			1.2	
Specific Gravity	ASTM D 792		1.14	
Density	ASTM D 792	g/cm3	1.14	
Mold Shrinkage		%		
Flow, 3.2mm (0.125in)			1.5	
Processing				
Melt Temperature Range		°C (°F)	280-305 (535-580)	
Mold Temperature Range		°C (°F)	40-95 (100-200)	
Processing Moisture Content		%	<0.2	

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