



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 Yield	ASTM D 638	%	4	
Elongation at Break	ASTM D 638	%	50	>300
Poisson's Ratio			0.4	
Flexural Modulus	ASTM D 790	MPa (kpsi)	2800 (410)	1210 (175)
Izod Impact	ASTM D 256	J/m (ft lb/in)	53 (1.0)	105 (2)
Thermal				
Heat Deflection Temperature 0.45MPa (66psi)	ASTM D 648	°C (°F)	210 (410)	
1.8MPa (264psi)			65 (149)	
CLTE, Parallel	ASTM D 696	E-4/C (E-4/F)	0.7 (0.39)	
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	ASTM D 149	kV/mm (V/mil)	23.2 (590)	
			16.5 (420)	
Dielectric Constant	ASTM D 150		4.1	
1E2 Hz		4.0		
1E3 Hz		3.7		
1E6 Hz				
Dissipation Factor	ASTM D 150		0.01	
			0.02	
			0.02	

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
Mechanical properties measured at 23°C (73°F) unless otherwise stated.

Zytel® is a DuPont registered trademark.

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The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-51459 or H-50102.

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Product Information

Zytel® 101F NC010

Property	Test Method	Units	Value	
			DAM	50%RH
Flammability				
Rating @ Thickness	UL94		V-2	
Thickness Tested	UL94	mm	0.7	
Other				
Specific Gravity	ASTM D 792		1.14	
Density	ASTM D 792	g/cm ³	1.14	
Water Absorption	ASTM D 570	%		
Immersion 24h			1.2	
Saturation			8.5	
Mold Shrinkage		%		
Flow, 3.2mm (0.126in)			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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