

## DuPont™ Zytel® HTN

high performance polyamide resin

### Zytel® HTNFR51G35L NC010

Zytel® HTNFR51G35L NC010 is a high temperature, semicrystalline, 35% glass fiber reinforced, flame retardant nylon resin.

Property	Test Method	Units	Value	
			DAM	50%RH
<b>Mechanical</b>				
Stress at Break	ISO 527-1/-2	MPa	165	
Strain at Break	ISO 527-1/-2	%	1.4	
Tensile Modulus	ISO 527-1/-2	MPa	15000	
Notched Izod Impact	ISO 180/1A	kJ/m <sup>2</sup>		
-30°C			14	
23°C			14	
Notched Charpy Impact	ISO 179/1eA	kJ/m <sup>2</sup>		
-30°C			13	
23°C			11	
Unnotched Charpy Impact	ISO 179/1eU	kJ/m <sup>2</sup>		
-30°C			35	
23°C			40	
<b>Thermal</b>				
Deflection Temperature	ISO 75-1/-2	°C		
0.45MPa			270	
1.80MPa			255	
Melting Temperature	ISO 11357-1/-3	°C		
10°C/min			295	

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 unless otherwise stated.

Test temperatures are 23°C unless otherwise stated.

During moulding, use proper protective equipment and adequate ventilation. Avoid exposure to fumes and limit the hold up time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.

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020724/020730

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Property	Test Method	Units	Value	
			DAM	50%RH
<b>Electrical</b>				
Surface Resistivity	IEC 60093	ohm	1 E13	
Volume Resistivity	IEC 60093	ohm m	>1E 13	1 E13
Electric Strength	IEC 60243-1	kV/mm		
1.0mm			34	34
CTI	IEC 60112	V		
1.0mm			525	525
<b>Flammability</b>				
Flammability Classification	UL94			
0.81mm			V-0	
1.5mm			V-0	
3.0mm			V-0	
Oxygen Index	ISO 4589-1/-2	%	37	37
<b>Other</b>				
Density	ISO 1183	kg/m <sup>3</sup>	1670	
Moulding Shrinkage	ISO 294-4	%		
Normal			0.7	
Parallel			0.2	
<b>Processing</b>				
Melt Temperature Range		°C	315-325	
Melt Temperature Optimum		°C	320	
Mould Temperature Range		°C	140-160	
Mould Temperature Optimum		°C	150	
Drying Time, Dehumidified Dryer		h	6-8	
Drying Temperature		°C	100	
Processing Moisture Content		%	<0.10	

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