DuPont™ Zytel® HTN

high performance polyamide resin

PRELIMINARY DATA

Zytel® HTNFR52G45NHLW BK337

Zytel® HTNFR52G45NHLW BK337 is a 45% glass reinforced, flame retardant, lubricated high performance polyamide resin with excellent flow and low warpage. It is also a PPA resin and it uses a non-halogenated flame retardant.

Property	Test Method	Units	Value	
			DAM	50%RH
Identification				
Part Marking Code	ISO 11469		>PA6T/66-G45FR<	
Part Marking Code	SAE J1344		>PPA-G45FR<	
Mechanical				
Stress at Break	ISO 527	MPa (kpsi)	90 (13)	85 (12)
Strain at Break	ISO 527	%	1.0	1.0
Tensile Modulus	ISO 527	MPa (kpsi)	14300 (2070)	14300 (2070)
Flexural Modulus	ISO 178	MPa (kpsi)	13600 (1970)	13600 (1970)
Flexural Strength	ISO 178	MPa (kpsi)	145 (21)	140 (20)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2		
-30°C (-22°F)			3	3
23°C (73°F)			3	3
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m^2		
-30°C (-22°F)			13	11
23°C (73°F)			15	13

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.

For molding machine components, use corrosion resistant and wear resistant steel. For details please contact your DuPont representative. Limit the residence time of the resin in the machine. Use proper protective equipment and adequate ventilation.

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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Property	Test Method	Units	Value	
			DAM	50%RH
Thermal				
Deflection Temperature	ISO 75-1/-2	°C (°F)		
1.80MPa			276 (528)	
Electrical				
Surface Resistivity	IEC 60093	ohm	>1E15	
Volume Resistivity	IEC 60093	ohm m	>1E13	
Electric Strength	IEC 60243-1	kV/mm (V/mil)		
1.0mm			31 (790)	
Dielectric Constant	ASTM D 2520 B			
1 GHz			4.2	
10 GHz			4.2	
Dissipation Factor	ASTM D 2520 B	E-4		
1 GHz			103	
10 GHz			108	
Flammability				
Flammability Classification	UL94			
0.4mm			V-0	
Glow Wire Flammability Index	IEC 60695-2-12	°C		
0.4mm			960	
3.0mm			960	
Glow Wire Ignition Temperature	IEC 60695-2-13	°C		
0.4mm			750	
3.0mm			800	
Other				
Density	ISO 1183	kg/m^3 (g/cm^3)	1630 (1.63)	
Molding Shrinkage	ISO 294-4	%		
Normal, 2.0mm			0.9	
Parallel, 2.0mm			0.5	

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Property	Test Method	Units	Value	
			DAM	50%RH
Processing				
Melt Temperature Range		°C (°F)	320-325 (605-615)	
Mold Temperature Range		°C (°F)	85-130 (185-265)	
Drying Time, Dehumidified Dryer		h	6-8	
Drying Temperature		°C (°F)	100 (210)	
Processing Moisture Content		%	<0.10	

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