DuPont™ Zytel® HTN

high performance polyamide resin

Zytel® HTN51G35HSLR BK420

Zytel® HTN51G35HSLR BK420 is a 35% glass reinforced, heat stabilized, lubricated high performance polyamide resin with improved hydrolysis resistance.

Property	Test Method	Units	Value	
			DAM	50%RH
Identification				
Part Marking Code	ISO 11469		>PA6T/XT-GF35<	
Part Marking Code	SAE J1344		>PPA-GF35<	
Mechanical				
Stress at Break	ISO 527	MPa (kpsi)	200 (29)	190 (27.5)
Strain at Break	ISO 527	%	2.3	2.0
Tensile Modulus	ISO 527	MPa (kpsi)	11500 (1670)	11500 (1670)
Flexural Modulus	ISO 178	MPa (kpsi)	10500 (1520)	
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2	9	8
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m^2	50	35

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.

During molding, 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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Property	Test Method	Units	Value	
			DAM	50%RH
Thermal				
Deflection Temperature	ISO 75-1/-2	°C (°F)		
0.45MPa			276 (529)	
1.80MPa			262 (503)	
Melting Temperature	ISO 11357-1/-3	°C (°F)		
10°C/min, First Heat			300 (572)	
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)		
-40 - 23°C (-40 - 73°F)			0.2 (0.11)	
23 - 55°C (73 - 130°F)			0.2 (0.11)	
55 - 125°C (130 - 257°F)			0.15 (0.08)	
165 - 200°C (329 - 392°F)			0.15 (0.08)	
CLTE, Normal	ISO 11359-1/-2	E-4/C (E-4/F)		
-40 - 23°C (-40 - 73°F)			0.55 (0.31)	
23 - 55°C (73 - 130°F)			0.58 (0.32)	
55 - 125°C (130 - 257°F)			0.62 (0.34)	
165 - 200°C (329 - 392°F)			0.75 (0.42)	
Electrical				
Surface Resistivity	IEC 60093	ohm	>1E15	
Volume Resistivity	IEC 60093	ohm m	>1E13	
Other				
Density	ISO 1183	kg/m^3 (g/cm^3)	1470 (1.47)	
Molding Shrinkage	ISO 294-4	%		
Normal, 2.0mm			0.6	
Parallel, 2.0mm			0.2	
Processing				
Melt Temperature Range		°C (°F)	320-330 (610-625)	
Melt Temperature Optimum		°C (°F)	325 (620)	
Mold Temperature Range		°C (°F)	140-160 (280-320)	
Mold Temperature Optimum		°C (°F)	150 (300)	
Drying Time, Dehumidified Dryer		h	6-8	
Drying Temperature		°C (°F)	100 (210)	
Processing Moisture Content		%	<0.10	

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