

Product Texts

Zytel® HTN high performance polyamide resins feature high retention of properties upon exposure to elevated temperature, to high moisture, and to harsh chemical environments. Polymer families and grades of Zytel® HTN are tailored to optimize performance as well as processability.

Typical applications with Zytel® HTN include demanding applications in the automotive, electrical and electronics, domestic appliances, and construction industries.

Zytel® HTN54G35EF BK420 is a 35% glass reinforced, toughened, heat stabilized high performance polyamide resin, developed for electrical and electronics applications. It is also a PPA resin.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.5 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	11000 / -	MPa	ISO 527
^[C] Stress at break	190 / -	MPa	ISO 527
^[C] Strain at break	3 / -	%	ISO 527
^[C] Charpy impact strength, +23°C	82 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	11 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	115 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	262 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	60 / *	E-6/K	ISO 11359-1/-2
^[C] Oxygen index	23 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.3 / -	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.9 / -	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	50 / -	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	155 / -	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13 / -	Ohm*m	IEC 62631-3-1
^[C] Electric strength	32 / 31	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Humidity absorption	1.8 / *	%	Sim. to ISO 62
^[C] Density	1420 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	120 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Applications

Automotive, Electrical and Electronical

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific, South and Central America

Chemical Resistance

General Chemical Resistance

Other text information**Injection molding**

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.