

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® HTN52G35HSL BK083 is a 35% glass reinforced, heat stabilized, lubricated high performance polyamide resin that can be molded in water heated molds. It is also a PPA resin.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
^[C] Density of melt	1100	kg/m ³	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	12000 / 12000	MPa	ISO 527
^[C] Stress at break	200 / 180	MPa	ISO 527
^[C] Strain at break	2.3 / 2.6	%	ISO 527
^[C] Charpy impact strength, +23°C	45 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	40 / 35	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	9 / 9	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	7 / 6	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	90 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	285 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	21 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	67 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning rate, FMVSS, Thickness 1 mm	44	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E13 / -	Ohm*m	IEC 62631-3-1
^[C] Electric strength	34 / 33	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Humidity absorption	2 / *	%	Sim. to ISO 62
^[C] Density	1460 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			

[C] Viscosity number

110 / *cm³/g

ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Additives

Lubricants

Special Characteristics

Heat stabilized or stable to heat

Chemical Resistance

General Chemical Resistance

Applications

Automotive, Electrical and Electronical

Regional Availability

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

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.