

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® HTN52G45HSL BK083 is a 45% 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	Value	Unit	Test Standard
ISO Data			
^[C] Density of melt	1450	kg/m ³	-
^[C] Thermal conductivity of melt	0.26	W/(m K)	-
^[C] Spec. heat capacity of melt	2050	J/(kg K)	-
^[C] Ejection temperature	240	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	15500 / -	MPa	ISO 527
^[C] Stress at break	235 / -	MPa	ISO 527
^[C] Strain at break	2 / -	%	ISO 527
^[C] Charpy impact strength, +23°C	65 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	12 / -	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] Coeff. of linear therm. expansion, parallel	17 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	58 / *	E-6/K	ISO 11359-1/-2
^[C] Burning rate, FMVSS, Thickness 1 mm	17	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Density	1560 / -	kg/m ³	ISO 1183

[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.