

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® HTN53G60LRHF BK083 is a 60% glass reinforced, lubricated, high performance polyamide resin with improved flow. It was developed for structural applications requiring excellent surface appearance using water-heated molds.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.1 / *	%	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	21000 / 20000	MPa	ISO 527
^[C] Stress at break	265 / 225	MPa	ISO 527
^[C] Strain at break	2.2 / 2.6	%	ISO 527
^[C] Charpy impact strength, +23°C	90 / 90	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	16 / 15	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	17 / 15	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	85 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	245 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	255 / *	°C	ISO 75-1/-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]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Density	1720 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Lubricants, Release agent

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.