

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® HTN54G15HSLR NC010 is a 15% glass reinforced, toughened, heat stabilized high performance polyamide resin. It is also a PPA resin.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	5500 / 5500	MPa	ISO 527
^[C] Stress at break	130 / 100	MPa	ISO 527
^[C] Strain at break	3.7 / 2.7	%	ISO 527
^[C] Tensile creep modulus, 1h	* / 5500	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	* / 5000	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	70 / 60	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	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	115 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	235 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	280 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	28 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	70 / *	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] Oxygen index	23 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.2 / -	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.9 / -	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	55 / -	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	135 / -	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13 / >1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / >1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	16.5 / -	kV/mm	IEC 60243-1
^[C] Comparative tracking index	575 / 575	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Density	1250 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

High impact or impact modified, 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 holdup time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.