

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® HTNFR52G30NH NC010 is a 30% glass reinforced, flame retardant high performance polyamide resin. It is also a PPA resin and it uses a non-halogenated flame retardant.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10500 / 10500	MPa	ISO 527
^[C] Stress at break	150 / 130	MPa	ISO 527
^[C] Strain at break	2.2 / 2	%	ISO 527
^[C] Charpy impact strength, +23°C	45 / 40	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	8 / 7	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	7 / 7	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	312 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	90 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	283 / *	°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] Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Oxygen index	37 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.1 / -	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.9 / -	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	65 / -	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	120 / -	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13 / 5E11	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / >1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	39 / -	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Density	1440 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Lubricants, Release agent

Special Characteristics

Flame retardant, Halogen-free

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

For molding machine components, use corrosion resistant and wear resistant steel. For details please contact our representative. Limit the residence time of the resin in the machine. Use proper protective equipment and adequate ventilation.