

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® HTNFE350064 BK544 is a carbon fiber reinforced, toughened, heat stabilized, conductive high performance polyamide resin developed for static dissipative applications. It is also a PPA resin.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.5 / *	%	ISO 294-4, 2577
^[C] Spec. heat capacity of melt	2600	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10400 / 11000	MPa	ISO 527
^[C] Stress at break	168 / 162	MPa	ISO 527
^[C] Strain at break	2.4 / 2.3	%	ISO 527
^[C] Charpy impact strength, +23°C	48 / -	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] Temp. of deflection under load, 1.80 MPa	258 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	14 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	83 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Comparative tracking index	- / 175	-	IEC 60112
ASTM Data			
Volume Resistivity	100000 / -	Ohm*cm	ASTM D 257

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Density	1200 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	105 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Chemical Resistance

General Chemical Resistance

Delivery form

Pellets, Black

Additives

Release agent

Special Characteristics

Increased electrical conductivity, Anti-static, High impact or impact modified, Heat stabilized or stable to heat

Applications

Automotive, Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

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.