

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® HTNFR55G50NHLW BK046 is a 50% glass reinforced, flame retardant high performance polyamide resin with improved flow and low warpage in structural applications requiring good surface appearance. It is also a PPA resin and uses a non-halogenated flame retardant.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.2 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	18000 / 19100	MPa	ISO 527
^[C] Stress at break	200 / 176	MPa	ISO 527
^[C] Strain at break	1.6 / 1.3	%	ISO 527
^[C] Charpy impact strength, +23°C	50 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	13 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	112 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	215 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	13 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	38 / *	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]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Density	1650 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	70 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant, Halogen-free, Heat stabilized or stable to heat

Features

Low Warpage

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.