

## 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® HTN53G50HSLR NC010 is a 50% glass reinforced, heat stabilized, lubricated high performance polyamide resin developed for moderate temperature structural applications requiring retention of high impact and stiffness.**

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.4 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	16500 / 16300	MPa	ISO 527
<sup>[C]</sup> Stress at break	250 / 215	MPa	ISO 527
<sup>[C]</sup> Strain at break	2.8 / 3.2	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	95 / -	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	15 / -	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Glass transition temperature, 10°C/min	85 / *	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	236 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	14 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	55 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
<sup>[C]</sup> Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
Yellow Card available	yes / *	-	-
<sup>[C]</sup> Burning rate, FMVSS, Thickness 1 mm	25	mm/min	ISO 3795 (FMVSS 302)
<sup>[C]</sup> Oxygen index	27 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	1E13 / -	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Density	1590 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

## Characteristics

### Processing

Injection Molding

### Chemical Resistance

General Chemical Resistance

**Additives**

Lubricants

**Applications**

Automotive, Electrical and Electronical

**Special Characteristics**

High impact or impact modified, Heat stabilized or stable to heat

**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.