

## 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® HTNFG52G35HSL BK011 is a 35% glass reinforced, lubricated, heat stabilized high performance polyamide resin, developed for consideration into applications for the food industry. It is also a PPA resin.**

### FOOD CONTACT

This product is manufactured according to Good Manufacturing Practice (GMP) principles and generally accepted in food contact applications in Europe and the USA when meeting applicable use conditions. For details, individual compliance statements are available from our representative.

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	0.8 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	1100	kg/m <sup>3</sup>	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	12000 / 12000	MPa	ISO 527
<sup>[C]</sup> Stress at break	200 / 180	MPa	ISO 527
<sup>[C]</sup> Strain at break	2 / 2.2	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	50 / -	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	8 / 8	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	90 / *	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	285 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	60 / *	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> Oxygen index	25 / *	%	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

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Humidity absorption	2 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1450 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

## Characteristics

**Processing**

Injection Molding

**Delivery form**

Pellets

**Additives**

Lubricants

**Special Characteristics**

Heat stabilized or stable to heat

**Chemical Resistance**

General Chemical Resistance

**Certifications**

Food contact

**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 hold up time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.