

Product Texts

Zytel® HTN51G35EF BK083 is a 35% glass reinforced, heat stabilized, lubricated, hydrolysis resistant high performance polyamide resin developed for electrical and electronics 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	0.6 / *	%	ISO 294-4, 2577
^[C] Spec. heat capacity of melt	1820	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	12100 / 11100	MPa	ISO 527
^[C] Stress at break	230 / 204	MPa	ISO 527
^[C] Strain at break	2.4 / 2.2	%	ISO 527
^[C] Charpy impact strength, +23°C	57 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	10 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	300 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	264 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	18 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	55 / *	E-6/K	ISO 11359-1/-2
^[C] Oxygen index	23 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.4 / -	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.3 / -	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	160 / -	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	190 / -	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13 / >1E13	Ohm*m	IEC 62631-3-1
^[C] Electric strength	32 / 31	kV/mm	IEC 60243-1
^[C] Comparative tracking index	525 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	4 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.4 / *	%	Sim. to ISO 62
^[C] Density	1470 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Additives

Lubricants

Special Characteristics

Heat stabilized or stable to heat

Chemical Resistance

Hydrolytically Stable

Applications

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.

When lower mold temperatures are used, the initial warpage and shrinkage may be lower, but the surface appearance and chemical resistance may be reduced, and the dimensional change may be greater when parts are subsequently heated.