Zytel® HTN51G35HSLR BK420

PA6T/XT-GF35 Celanese

Product Texts

Zytel® HTN51G35HSLR BK420 is a 35% glass reinforced, heat stabilized, lubricated, hydrolysis resistant high performance polyamide resin. It is also a PPA resin.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**19 / ***	cm³/10min	ISO 1133
Temperature	**325 / ***	°C	-
Load	**2.16 / ***	kg	-
[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)	-
ASTM Data			
Mold Shrinkage, MD	**0.002**	mm/mm	ASTM D 955

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**12000 / 12000**	MPa	ISO 527
[C] Stress at break	**200 / 190**	MPa	ISO 527
[C] Strain at break	**2.3 / 2**	%	ISO 527
[C] Charpy impact strength, +23°C	**50 / 40**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**9 / 8**	kJ/m²	ISO 179/1eA
ASTM Data			
Flexural Strength	**320 / -**	MPa	ASTM D 790

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Glass transition temperature, 10°C/min	**135 / ***	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**262 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**276 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**20 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**58 / ***	E-6/K	ISO 11359-1/-2
[C] Burning rate, FMVSS, Thickness 1 mm	**28**	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**1E13 / -**	Ohm*m	IEC 62631-3-1
[C] Electric strength	**34 / 33**	kV/mm	IEC 60243-1

[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/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Delivery form
Pellets, Black

Features
Weldable

Chemical Resistance
Hydrolytically Stable

Additives
Lubricants, Release agent

Special Characteristics
Heat stabilized or stable to heat

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.

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.