

# Zytel® HTN 51G35HSLR BK420

HIGH PERFORMANCE POLYAMIDE RESIN

DuPont Performance Polymers

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## Technical Data

### Product Description

35% Glass Reinforced, PPA, High Performance Polyamide

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Processing - Injection Molding (English)</a>
Search for UL Yellow Card	• <a href="#">DuPont Performance Polymers</a>
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Additive	• Heat Stabilizer • Lubricant • Mold Release
Features	• Heat Stabilized
RoHS Compliance	• Contact Manufacturer
Forms	• Pellets
Processing Method	• Injection Molding
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1) • Secant Modulus vs. Strain (ISO 11403-1)
Part Marking Code (ISO 11469)	• PA6T/XT-GF35
Part Marking Code (SAE J1344)	• >PPA-GF35<
Resin ID (ISO 1043)	• PA6T/XT-GF35

Physical	Dry	Conditioned	Unit	Test Method
Density	1.47	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.60	--	%	
Flow	0.20	--	%	
Viscosity Number				ISO 307
96% H2SO4 (Sulphuric Acid)	100	--	cm <sup>3</sup> /g	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	12000	12000	MPa	ISO 527-2
Tensile Stress (Break)	200	190	MPa	ISO 527-2
Tensile Strain (Break)	2.3	2.0	%	ISO 527-2
Flexural Modulus	10500	--	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (23°C)	9.0	8.0	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	50	40	kJ/m <sup>2</sup>	ISO 179/1eU
Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness (H 961/30)	310	--	MPa	ISO 2039-1
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	276	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	262	--	°C	ISO 75-2/A
Melting Temperature <sup>3</sup>	300	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	2.0E-5	--	cm/cm/°C	
Flow : -40 to 23°C	2.0E-5	--	cm/cm/°C	
Transverse	5.8E-5	--	cm/cm/°C	
Transverse : -40 to 23°C	5.5E-5	--	cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	1.0E+15	--	ohms-cm	IEC 60093
Electric Strength	34	33	kV/mm	IEC 60243-1

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Form No. TDS-72021-en

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The information presented on this datasheet was acquired by UL Prospector from the producer of the material. UL Prospector makes substantial efforts to assure the accuracy of this data. However, UL Prospector assumes no responsibility for the data values and strongly encourages that upon final material selection, data points are validated with the material supplier.

Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate <sup>4</sup> (1.00 mm)	28	--	mm/min	ISO 3795
FMVSS Flammability	B	--		FMVSS 302
Additional Information	Dry	Conditioned	Unit	Test Method
Odor	4.00	--		VDA 270

Injection	Dry Unit
Drying Temperature	100 °C
Drying Time - Desiccant Dryer	6.0 to 8.0 hr
Suggested Max Moisture	0.10 %
Processing (Melt) Temp	320 to 330 °C
Melt Temperature, Optimum	325 °C
Mold Temperature	140 to 180 °C
Mold Temperature, Optimum	150 °C
Drying Recommended	yes

**Notes**

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> First Heat

<sup>4</sup> FMVSS 302



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## Where to Buy

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### Supplier

#### DuPont Performance Polymers

Wilmington, DE USA  
**Telephone:** 302-999-4592  
**Web:** <http://plastics.dupont.com/>

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### Distributor

#### Biesterfeld Plastic GmbH

*Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH for availability of individual products by country.*

**Telephone:** +49-40-32008-0

**Web:** <http://www.biesterfeld-plastic.com/>

**Availability:** Algeria, Austria, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey

#### CCC Plastics

**Telephone:** 800-465-6917

**Web:** <http://www.cccplastics.com/>

**Availability:** Canada

#### Distrupol Ltd

*Distrupol Ltd is a Pan European distribution company. Contact Distrupol Ltd for availability of individual products by country.*

**Telephone:** 08452003040

**Web:** <http://www.distrupol.com/>

**Availability:** Denmark, Finland, Ireland, Norway, Sweden, United Kingdom

#### PolyOne Distribution

*PolyOne Distribution is a global distribution company. Contact PolyOne Distribution for availability of individual products by country.*

**Telephone:** 800-894-4266

**Web:** <http://polyonedistribution.com/>

**Availability:** Global

