

# Zytel® HTN 51G15HSL BK083

HIGH PERFORMANCE POLYAMIDE RESIN

DuPont Performance Polymers

# PROSPECTOR®

www.ulprospector.com

## Technical Data

### Product Description

15% Glass Reinforced, PPA, High Performance Polyamide

### General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Stabilized
RoHS Compliance	• Contact Manufacturer
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• PA6T/XT-GF15
Part Marking Code (SAE J1344)	• >PPA-GF15<
Resin ID (ISO 1043)	• PA6T/XT-GF15

Physical	Dry	Conditioned	Unit	Test Method
Density	1.30	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.60	--	%	
Flow	0.30	--	%	

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	943000 (6500)	943000 (6500)	psi (MPa)	ISO 527-2
Tensile Stress (Break)	16000 (110)	16000 (110)	psi (MPa)	ISO 527-2
Tensile Strain (Break)	2.0	1.9	%	ISO 527-2
Flexural Modulus	841000 (5800)	--	psi (MPa)	ISO 178
Poisson's Ratio	0.35	0.35		ISO 527

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F (-40°C)	2.4 (5.0)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
73°F (23°C)	2.4 (5.0)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F (23°C)	11 (23)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
Notched Izod Impact Strength				ISO 180/1A
-40°F (-40°C)	2.4 (5.0)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
73°F (23°C)	2.4 (5.0)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	



Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	529 (276)	--	°F (°C)	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	482 (250)	--	°F (°C)	ISO 75-2/A
Melting Temperature <sup>2</sup>	572 (300)	--	°F (°C)	ISO 11357-3

Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	1.0E+13	--	ohms·m	IEC 62631-3-1
Comparative Tracking Index	575	--	V	IEC 60112

Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate <sup>3</sup> (0.0394 in (1.00 mm))	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
Flame Rating				UL 94 IEC 60695-11-10, -20
0.030 in (0.75 mm)	HB	--		
0.06 in (1.5 mm)	HB	--		
Oxygen Index	23	--	%	ISO 4589-2
FMVSS Flammability	B	--		FMVSS 302

Injection	Dry (English)	Dry (SI)
Drying Temperature	212 °F	100 °C
Drying Time - Desiccant Dryer	6.0 to 8.0 hr	6.0 to 8.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Processing (Melt) Temp	608 to 626 °F	320 to 330 °C
Melt Temperature, Optimum	617 °F	325 °C
Mold Temperature	284 to 356 °F	140 to 180 °C
Mold Temperature, Optimum	302 °F	150 °C
Drying Recommended	yes	yes

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> First Heat

<sup>3</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

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### Reseller

A Reseller is not a distributor authorized by the Supplier.

#### Shanghai Jingyang New Material Technology Co., Ltd

**Telephone:** +86-021-80394788; Mr. Zhou: +86-15821998203

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

**Availability:** Asia Pacific, China

