Zytel® HTN 54G15HSLR BK031
HIGH PERFORMANCE POLYAMIDE RESIN

Product Description
Zytel® HTN54G15HSLR BK031 is a 15% glass reinforced, toughened, heat stabilized, hydrolysis resistant high performance polyamide resin. It is also a PPA resin.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement, 15% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Heat Stabilized	• Hydrolysis Resistant	• Ultrasonic Weldable
RoHS Compliance	• Contact Manufacturer		
Appearance	• Black		
Processing Method	• Injection Molding		
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)		
Part Marking Code (ISO 11469)	• >PA-IGF15<		
Resin ID (ISO 1043)	• PA6T/XT+PA6T/66-IGF15		
Product Category	• Glass Reinforced Resins	• Hydrolysis Resistant Resins	• Toughened Resins
Part Marking Code (SAE J1344)	• >PPA-IGF15<		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.25	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow: 0.0787 in	0.70	--	%	
Flow: 0.0787 in	0.40	--	%	
Water Absorption (73°F, 24 hr)	0.80	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	798000	885000	psi	ISO 527-2
Tensile Stress (Break, 73°F)	18100	17100	psi	ISO 527-2
Tensile Strain				ISO 527-2
Yield, 73°F	3.1	--	%	
Break, 73°F	3.5	3.0	%	
Nominal Tensile Strain at Break (73°F)	4.2	--	%	ISO 527-2
Flexural Modulus (73°F)	711000	--	psi	ISO 178
Flexural Strength (73°F)	30500	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	2.4	--	ft·lb/in²	
73°F	2.9	--	ft·lb/in²	
Charpy Unnotched Impact Strength (73°F)	29	--	ft·lb/in²	ISO 179/1eU
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
66 psi, Unannealed	531	--	°F	ISO 75-2/B
264 psi, Unannealed	446	--	°F	ISO 75-2/A
Melting Temperature [2]	572	--	°F	ISO 11357-3
CLTE				ISO 11359-2
Flow: -40 to 73°F	0.000019	--	in/in/°F	
Flow: 73 to 131°F	0.000019	--	in/in/°F	
Flow: 320 to 392°F	0.000014	--	in/in/°F	
Transverse: -40 to 73°F	0.000039	--	in/in/°F	
Transverse: 73 to 131°F	0.000041	--	in/in/°F	
Transverse: 320 to 392°F	0.000050	--	in/in/°F	

To find out more, visit plastics.dupont.com or contact the nearest DuPont location.

North America
Tel: +1 302 999-4592
Toll-Free (USA): 800 441-0575

Asia Pacific
Tel: +81 3 5521 2771

Europe/Middle East/Africa
Tel: +41 22 717 51 11

The miracles of science™

Zytel® HTN 54G15HSLR BK031
HIGH PERFORMANCE POLYAMIDE RESIN

Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+16	--	ohms	IEC 60093
Volume Resistivity	1.0E+15	--	ohm·cm	IEC 60093
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating - UL (0.0315 in)	HB	--		UL 94
UL	**Dry**	**Conditioned**	**Unit**	**Test Method**
RTI Str				UL 746
0.0315 in	239	--	°F	
0.0591 in	266	--	°F	
0.118 in	284	--	°F	
RTI Imp				UL 746
0.0315 in	221	--	°F	
0.0591 in	248	--	°F	
0.118 in	266	--	°F	
RTI Elec				UL 746
0.0315 in	302	--	°F	
0.118 in	302	--	°F	

Injection	Dry Unit
Drying Temperature	212 °F
Drying Time	6.0 to 8.0 hr
Suggested Max Moisture	< 0.10 %
Processing (Melt) Temp	608 to 626 °F
Melt Temperature, Optimum	617 °F
Mold Temperature	185 to 275 °F
Mold Temperature, Optimum	203 °F

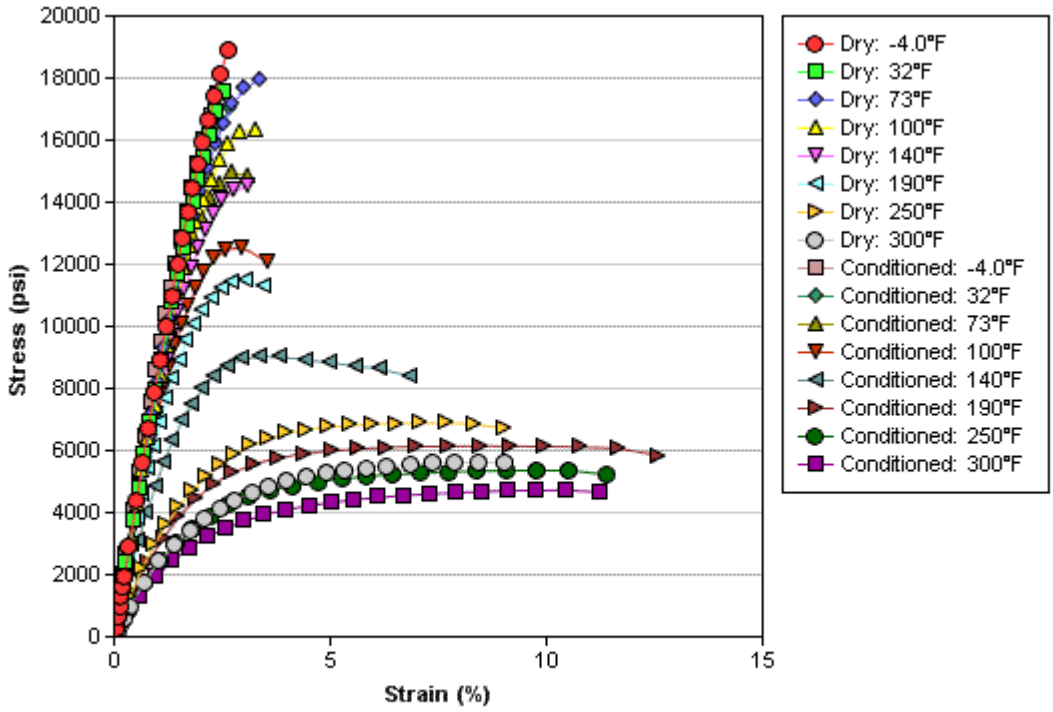
To find out more, visit plastics.dupont.com or contact the nearest DuPont location.

North America
Tel: +1 302 999-4592
Toll-Free (USA): 800 441-0575

Asia Pacific
Tel: +81 3 5521 2771

Europe/Middle East/Africa
Tel: +41 22 717 51 11

Isothermal Stress vs. Strain (ISO 11403-1)



Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 10°C/min, First Heat

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.

ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.

Test temperatures are 23°C unless otherwise stated.

To find out more, visit plastics.dupont.com or contact the nearest DuPont location.

North America
Tel: +1 302 999-4592
Toll-Free (USA): 800 441-0575

Asia Pacific
Tel: +81 3 5521 2771

Europe/Middle East/Africa
Tel: +41 22 717 51 11