

DuPont™ Zytel® HTNFR52G30NH BK337

HIGH PERFORMANCE POLYAMIDE RESIN

Product Information

Zytel® HTN high performance polyamide resins feature high retention of properties upon exposure to elevated temperature, to high moisture, and to harsh chemical environments. Polymer families and grades of Zytel® HTN are tailored to optimize performance as well as processability.

Typical applications with Zytel® HTN include demanding applications in the automotive, electrical and electronics, domestic appliances, and construction industries.

Zytel® HTNFR52G30NH BK337 is a 30% glass reinforced, flame retardant high performance polyamide resin. It is also a PPA resin and it uses a non-halogenated flame retardant.

General information	Value	Unit	Test Standard
Resin Identification	PA6T/66-GF30FR(40)	-	ISO 1043
Part Marking Code	PA6T/66-GF30FR(40)	-	ISO 11469
Part Marking Code	>PPA-GF30FR<	-	SAE J1344
Rheological properties	dry / cond	Unit	Test Standard
Molding shrinkage, parallel	0.3 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1 / -	%	ISO 294-4, 2577
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	10000 / -	MPa	ISO 527-1/-2
Stress at break	150 / -	MPa	ISO 527-1/-2
Strain at break	2.2 / -	%	ISO 527-1/-2
Flexural Modulus	8700 / -	MPa	ISO 178
Flexural Strength	230 / -	MPa	ISO 178
Charpy notched impact strength, 73 °F	8 / -	kJ/m ²	ISO 179/1eA
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, first heat	310 / *	°C	ISO 11357-1/-3
Temp. of deflection under load, 260 psi	283 / *	°C	ISO 75-1/-2
RTI, electrical			UL 746B
15mil	140	°C	
30mil	140 / *	°C	
60mil	140 / *	°C	
120mil	140	°C	
RTI, impact			UL 746B
30mil	115	°C	
60mil	115 / *	°C	
120mil	120	°C	
RTI, strength			UL 746B
30mil	125	°C	
60mil	125 / *	°C	
120mil	130	°C	
Flammability	dry / cond	Unit	Test Standard
Burning Behav. at 60mil nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	yes / *	-	UL 94
Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
UL recognition	yes / *	-	UL 94
Oxygen index	37 / *	%	ISO 4589-1/-2
Glow Wire Flammability Index			IEC 60695-2-12
30mil	960 / -	°C	
120mil	960 / -	°C	

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

Asia Pacific

Europe/Middle East/Africa

DONGGUAN FUMEI PLASTICS CO.,LTD.

TEL: +86 0769-82339888 / 87798999

EMAIL: fumei@foomx.com



DuPont™ Zytel® HTNFR52G30NH BK337

HIGH PERFORMANCE POLYAMIDE RESIN

Glow Wire Ignition Temperature			
15mil	700 / -	°C	IEC 60695-2-12
30mil	725 / -	°C	IEC 60695-2-13
120mil	775 / -	°C	IEC 60695-2-13
FMVSS Class	DNI	-	ISO 3795 (FMVSS 302)
Electrical properties			
	dry / cond	Unit	Test Standard
Relative permittivity			
100Hz	4.3 / -	-	IEC 62631-2-1
1MHz	4 / -	-	
Dissipation factor			
100Hz	70 / -	E-4	IEC 62631-2-1
1MHz	130 / -	E-4	
Volume resistivity	>1E13 / -	Ohm*m	IEC 62631-3-1
Electric strength	33 / -	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112
Electric Strength, Short Time, 2mm	26 / -	kV/mm	IEC 60243-1
Dielectric Constant, 23°C			
1 GHz	3.7 / -	-	ASTM D 2520 B
10 GHz	3.8 / -	-	
Dissipation Factor, 23°C			
1 GHz	120 / -	E-4	ASTM D 2520 B
10 GHz	100 / -	E-4	
Other properties			
	dry / cond	Unit	Test Standard
Density	1440 / -	kg/m ³	ISO 1183
VDA Properties			
	Value	Unit	Test Standard
Emission of organic compounds	10	µgC/g	VDA 277
Odor test	3.5	class	VDA 270
Injection			
	Value	Unit	Test Standard
Drying Recommended	yes	-	-
Drying Temperature	≥100	°C	-
Drying Time, Dehumidified Dryer	6 - 8	h	-
Processing Moisture Content	≤0.1	%	-
Min. melt temperature	320	°C	-
Max. melt temperature	325	°C	-
Min. mold temperature	90	°C	-
Max. mold temperature	130	°C	-

Characteristics

Processing	• Injection Molding		
Regional Availability	• North America	• Asia Pacific	• Near East/Africa
	• Europe	• South and Central America	• Global

Processing Texts

Injection molding

For molding machine components, use corrosion resistant and wear resistant steel. For details please contact your DuPont representative. Limit the residence time of the resin in the machine. Use proper protective equipment and adequate ventilation.

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

DONGGUAN FUMEI PLASTICS CO.,LTD.

EMAIL: fumei@foomx.com

Asia Pacific

TEL: +86 0769-82339888 / 87798999

Europe/Middle East/Africa

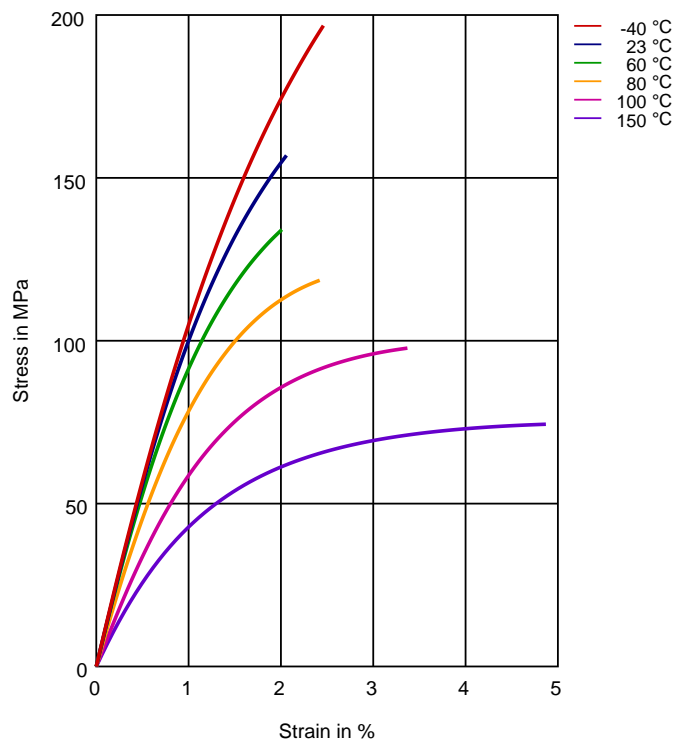


DuPont™ Zytel® HTNFR52G30NH BK337

HIGH PERFORMANCE POLYAMIDE RESIN

Diagrams

Stress-strain (dry)



Revised: 2018-04-30

Page: 3 of 6

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

DONGGUAN FUMEI PLASTICS CO.,LTD.

EMAIL: fumei@foomx.com

Asia Pacific

TEL: +86 0769-82339888 / 87798999

Europe/Middle East/Africa

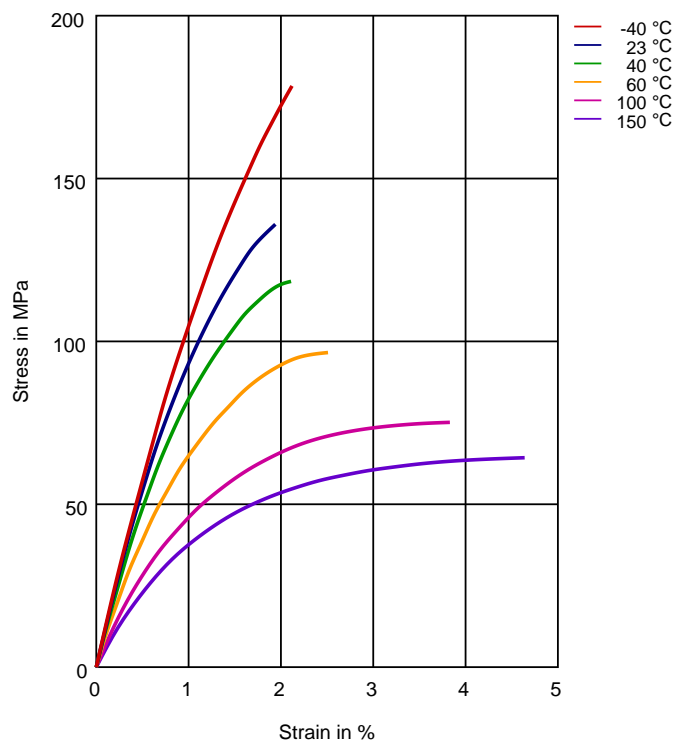
Copyright 2017 DuPont. The DuPont Oval Logo is a trademark or registered trademark of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.



DuPont™ Zytel® HTNFR52G30NH BK337

HIGH PERFORMANCE POLYAMIDE RESIN

Stress-strain (cond.)



To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

DONGGUAN FUMEI PLASTICS CO.,LTD.

EMAIL: fumei@foomx.com

Asia Pacific

TEL: +86 0769-82339888 / 87798999

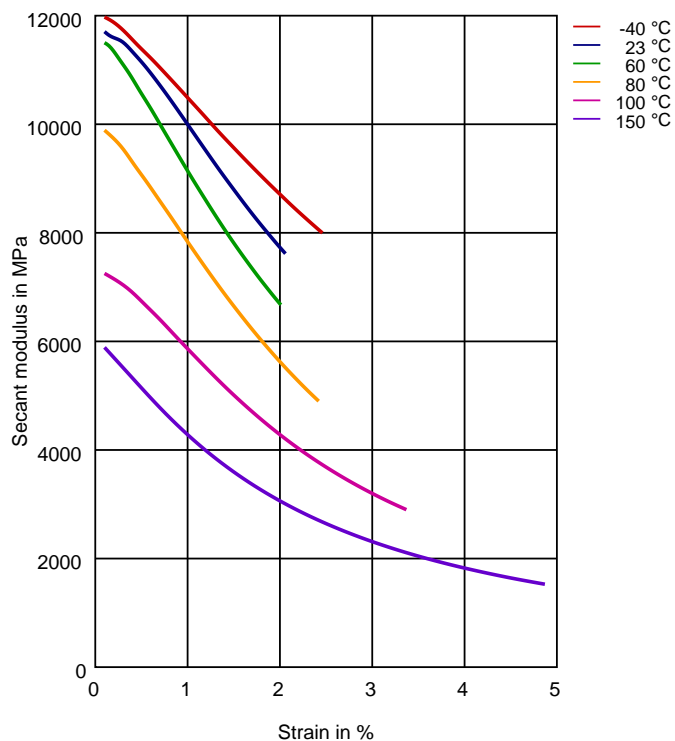
Europe/Middle East/Africa



DuPont™ Zytel® HTNFR52G30NH BK337

HIGH PERFORMANCE POLYAMIDE RESIN

Secant modulus-strain (dry)



To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

DONGGUAN FUMEI PLASTICS CO.,LTD.

EMAIL: fumei@foomx.com

Asia Pacific

TEL: +86 0769-82339888 / 87798999

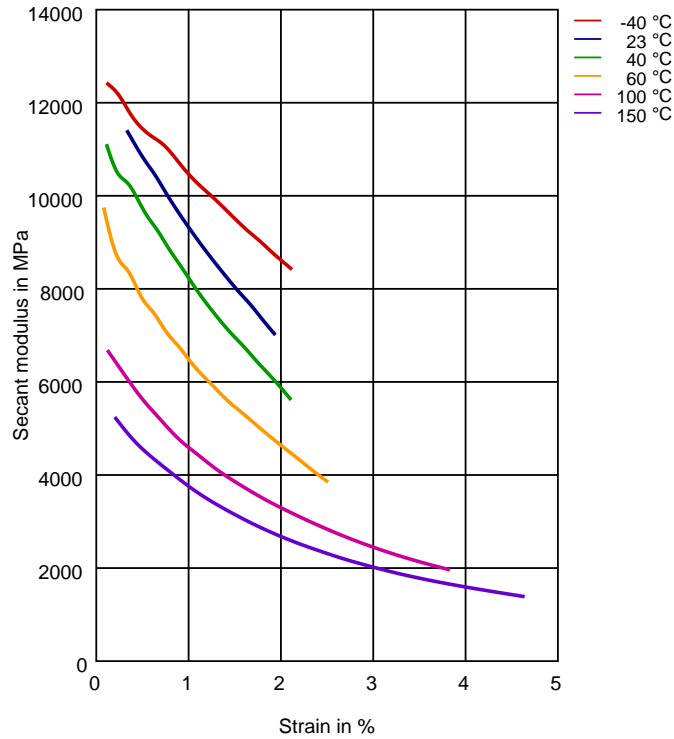
Europe/Middle East/Africa



DuPont™ Zytel® HTNFR52G30NH BK337

HIGH PERFORMANCE POLYAMIDE RESIN

Secant modulus-strain (cond.)



Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 160 mil (Hytrel® measured at 80 mil), IEC Electrical properties measured at 80 mil, all ASTM properties measured at 120 mil, and test temperatures are 73 °F unless otherwise stated.

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls within the normal range of properties. It is intended for use by persons having technical skill, at their own discretion and risk. This data should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents. Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, discuss with your DuPont customer representative and read Medical Caution H-50103-5.

Copyright © 2017 DuPont or its affiliates. All Rights Reserved. The DuPont Oval Logo, DuPont™, The miracles of science™ and all products denoted with ® or ™ are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates.

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

DONGGUAN FUMEI PLASTICS CO.,LTD.

EMAIL: fumei@foomx.com

Asia Pacific

TEL: +86 0769-82339888 / 87798999

Europe/Middle East/Africa

