

DuPont™ Zytel® RS LC3060 NC010

NYLON RESIN

Product Information

Zytel® RS LC3060 NC010 is an unreinforced, medium viscosity, biobased polyamide 610 resin developed for extrusion applications.

General information	Value	Unit	Test Standard
Resin Identification	PA6.10	-	ISO 1043
Part Marking Code	PA6.10	-	ISO 11469
Rheological properties	dry / cond	Unit	Test Standard
Viscosity number	150 ⁽¹⁾ / *	cm ³ /g	ISO 307, 1157, 1628
Molding shrinkage, parallel	1.4 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	1.5 / -	%	ISO 294-4, 2577
1: Sulfuric acid 96%			
Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Abrasion resistance	5.5 / *	mm ³	ISO 4649
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	2000 / 1200	MPa	ISO 527-1/-2
Yield stress	64 / 52	MPa	ISO 527-1/-2
Yield strain	5 / 30	%	ISO 527-1/-2
Nominal strain at break	>50 / >50	%	ISO 527-1/-2
Stress at Break, 23°C, 50mm/min	62 / -	MPa	ISO 527-1/-2
Strain at Break, 23°C, 50mm/min	230 / -	%	ISO 527-1/-2
Flexural Modulus	1900 / 1100	MPa	ISO 178
Charpy notched impact strength			ISO 179/1eA
73°F	8 / -	kJ/m ²	
-40°F	7 / -	kJ/m ²	
Izod notched impact strength, 73°F	5 / 20	kJ/m ²	ISO 180/1A
Hardness, Rockwell, M-scale	75 / 60	-	ISO 2039-2
Coefficient of static friction, against steel	- / 0.23	-	ASTM 1894
Coefficient of sliding friction, 1h against steel	- / 0.31	-	ASTM 1894
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 18°F/min	223 / *	°C	ISO 11357-1/-3
Glass transition temperature, 18°F/min	60 / 50	°C	ISO 11357-1/-2
Temp. of deflection under load			ISO 75-1/-2
260 psi	55 / *	°C	
65 psi	155 / *	°C	
Coeff. of linear therm. expansion, parallel	90 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	150 / *	E-6/K	ISO 11359-1/-2
Flammability	dry / cond	Unit	Test Standard
Burning Behav. at 60mil nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Oxygen index	24 / *	%	ISO 4589-1/-2
FMVSS Class	B	-	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	<100	mm/min	ISO 3795 (FMVSS 302)
Electrical properties	dry / cond	Unit	Test Standard
Relative permittivity			IEC 62631-2-1
100Hz	3.9 / -	-	
1MHz	3.3 / -	-	
Dissipation factor			IEC 62631-2-1
100Hz	400 / -	E-4	
1MHz	300 / -	E-4	
Volume resistivity	1E13 / 1E9	Ohm*m	IEC 62631-3-1
Comparative tracking index	600 / 600	-	IEC 60112

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® RS LC3060 NC010

NYLON RESIN

Dielectric Constant, 23°C			ASTM D 2520 B
1 GHz	2.8 / -	-	
10 GHz	2.7 / -	-	
Other properties	dry / cond	Unit	Test Standard
Humidity absorption, 80mil	1.4 / *	%	Sim. to ISO 62
Water absorption, 80mil	3.3 / *	%	Sim. to ISO 62
Density	1070 / -	kg/m ³	ISO 1183
Extrusion	Value	Unit	Test Standard
Drying Temperature	75 - 80	°C	-
Drying Time, Dehumidified Dryer	3 - 4	h	-
Processing Moisture Content	≤0.06	%	-
Melt Temperature Optimum	245	°C	-
Melt Temperature Range	240 - 255	°C	-
Characteristics			
Processing	<ul style="list-style-type: none">• Injection Molding• Profile Extrusion	<ul style="list-style-type: none">• Sheet Extrusion• Other Extrusion	
Delivery form	<ul style="list-style-type: none">• Pellets		

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

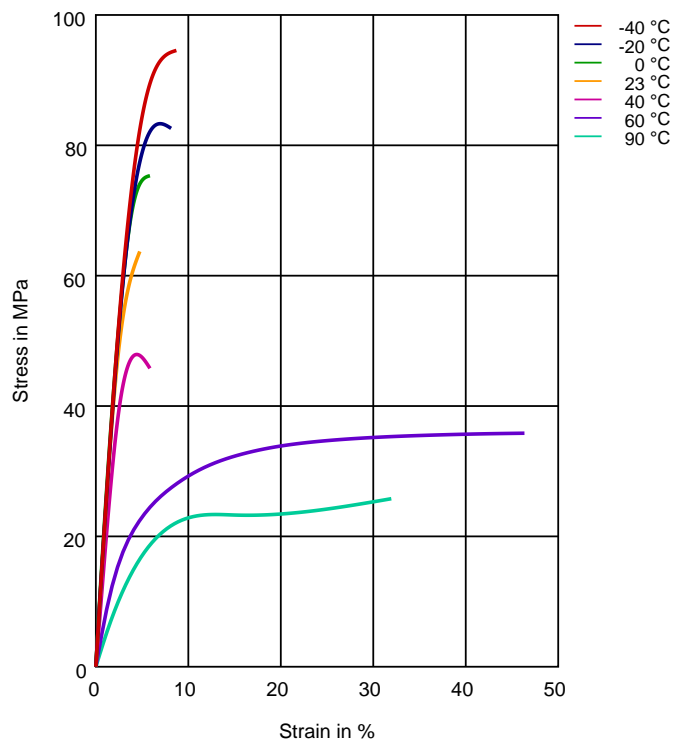


DuPont™ Zytel® RS LC3060 NC010

NYLON RESIN

Diagrams

Stress-strain (dry)



Revised: 2018-07-12

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

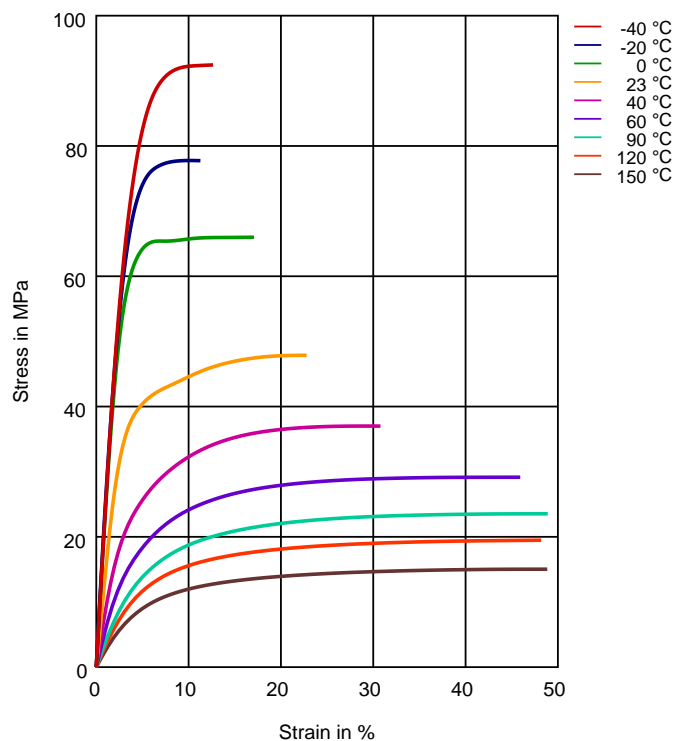
Copyright 2017 DuPont. The DuPont Oval Logo is a trademark or registered trademark of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.



DuPont™ Zytel® RS LC3060 NC010

NYLON 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

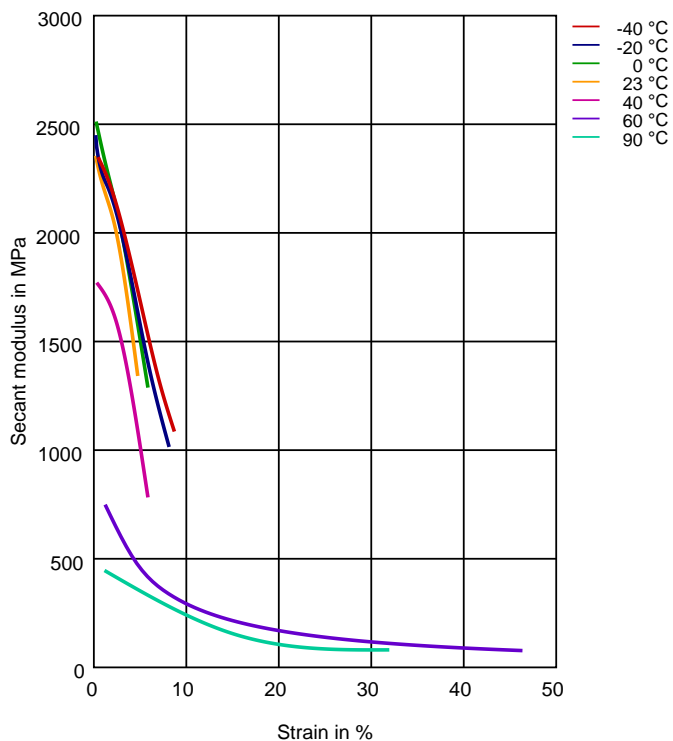
Europe/Middle East/Africa



DuPont™ Zytel® RS LC3060 NC010

NYLON 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

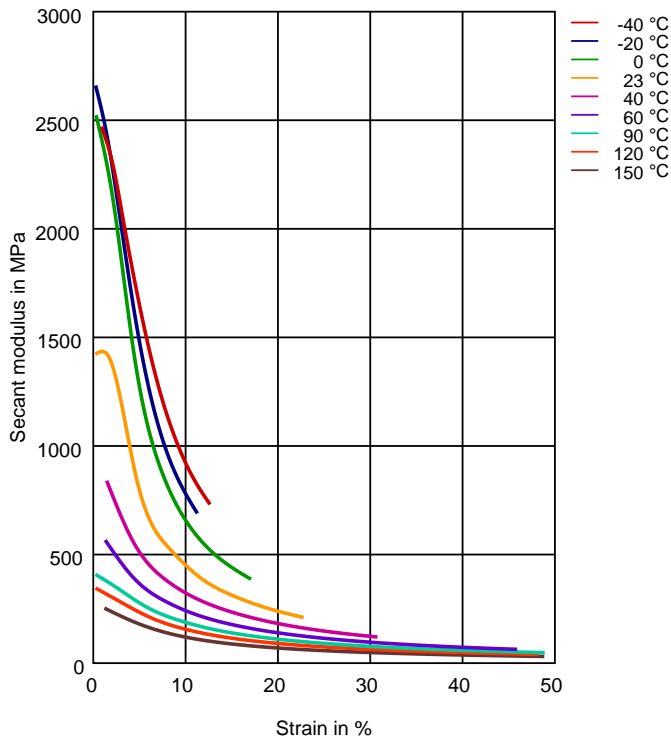
Europe/Middle East/Africa



DuPont™ Zytel® RS LC3060 NC010

NYLON 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

