

DuPont™ Zytel® LCBM6301 BK010 (Preliminary Data)

NYLON RESIN

Product Information

DuPont™ Zytel® LCPA long chain polyamide resins provide an innovative and growing portfolio of flexible polymers with excellent thermal, chemical, and hydrolysis resistance. The diverse selection of Zytel® LCPA grades is targeted for a range of performance characteristics, balancing temperature resistance, flexibility and low permeation.

Zytel® LCBM6301 BK010 is a toughened polyamide 612 resin for blow molding applications.

General information	Value	Unit	Test Standard
Resin Identification	PA612-HI	-	ISO 1043
Part Marking Code	PA612-HI	-	ISO 11469
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	1100 / 750	MPa	ISO 527-1/-2
Yield stress	32 / 29	MPa	ISO 527-1/-2
Yield strain	12 / 30	%	ISO 527-1/-2
Nominal strain at break	>50 / >50	%	ISO 527-1/-2
Strain at Break, 23°C, 50mm/min	100 / 285	%	ISO 527-1/-2
Charpy notched impact strength			ISO 179/1eA
73°F	35 / 80	kJ/m ²	
-22°F	13 / 12	kJ/m ²	
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 18°F/min	216 / *	°C	ISO 11357-1/-3
Temp. of deflection under load			ISO 75-1/-2
260 psi	47 / *	°C	
65 psi	83 / *	°C	
Flammability	Value	Unit	Test Standard
FMVSS Class	B	-	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	<100	mm/min	ISO 3795 (FMVSS 302)
Other properties	dry / cond	Unit	Test Standard
Humidity absorption, 80mil	0.65 / *	%	Sim. to ISO 62
Density	1010 / -	kg/m ³	ISO 1183

Characteristics

Processing	• Injection Molding	• Blow Molding
Delivery form	• Pellets	
Special characteristics	• Heat stabilized or stable to heat	

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

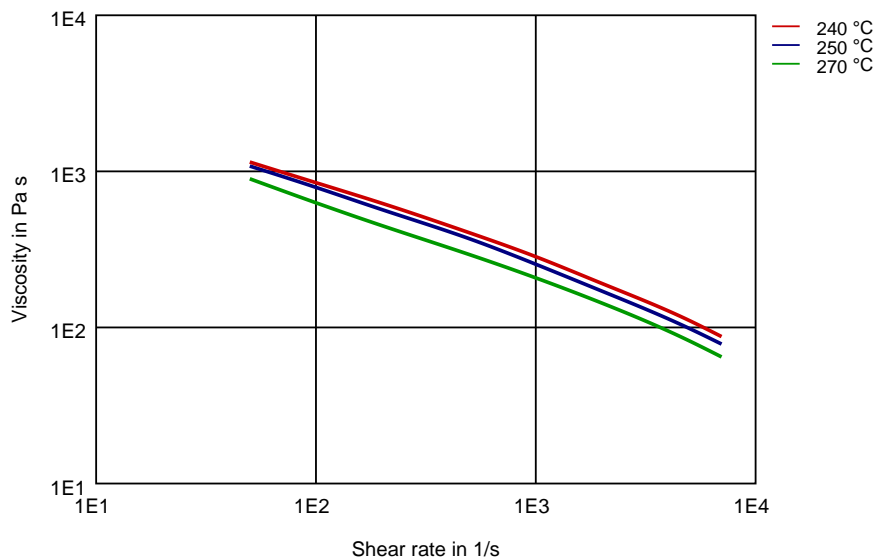


DuPont™ Zytel® LCBM6301 BK010 (Preliminary Data)

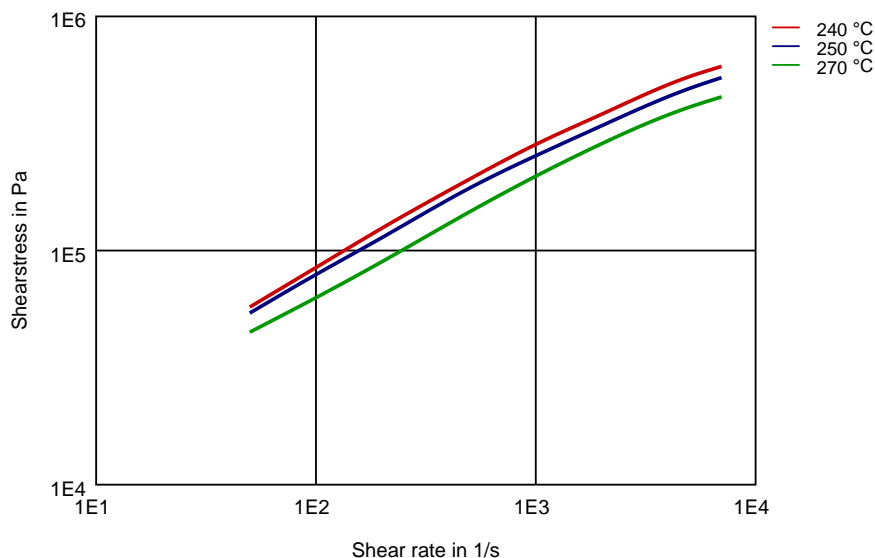
NYLON RESIN

Diagrams

Viscosity-shear rate



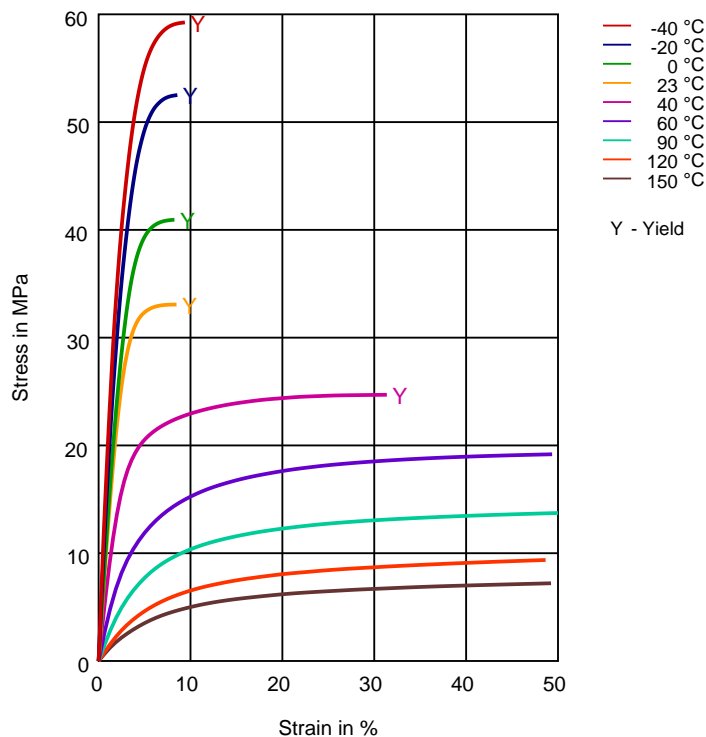
Shearstress-shear rate



DuPont™ Zytel® LCBM6301 BK010 (Preliminary Data)

NYLON RESIN

Stress-strain (dry)



Revised: 2018-02-27

Page: 3 of 8

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

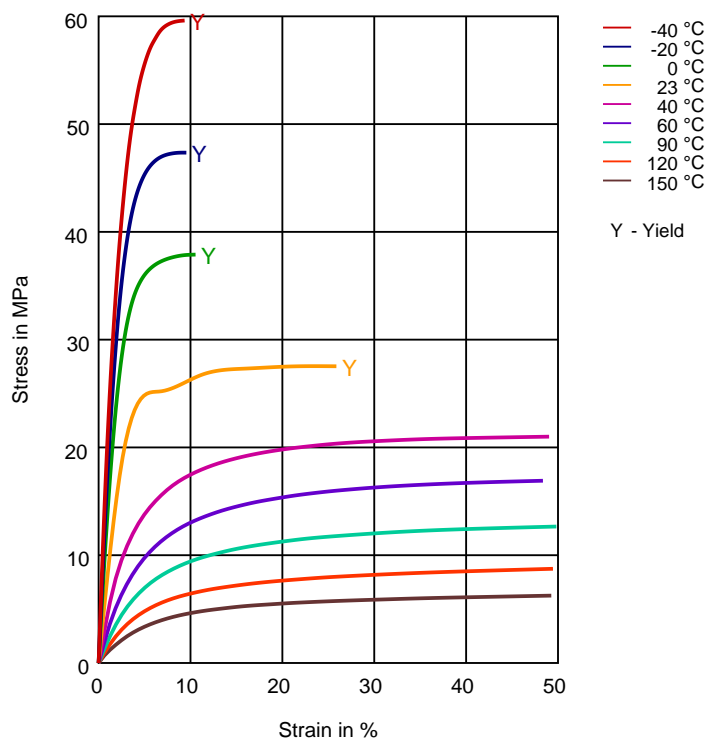
Copyright 2017 DuPont. The DuPont Oval Logo is a trademark or registered trademark of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.



DuPont™ Zytel® LCBM6301 BK010 (Preliminary Data)

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

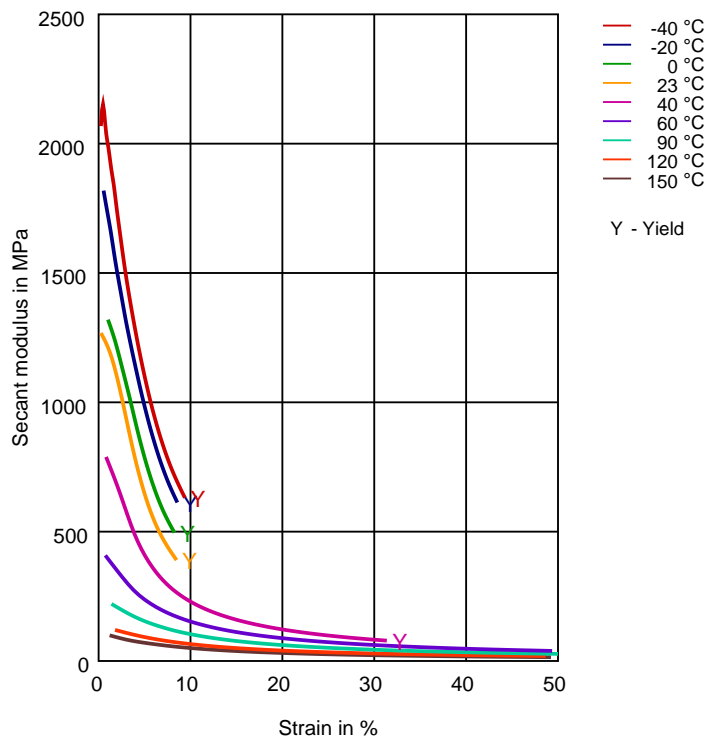
Europe/Middle East/Africa



DuPont™ Zytel® LCBM6301 BK010 (Preliminary Data)

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

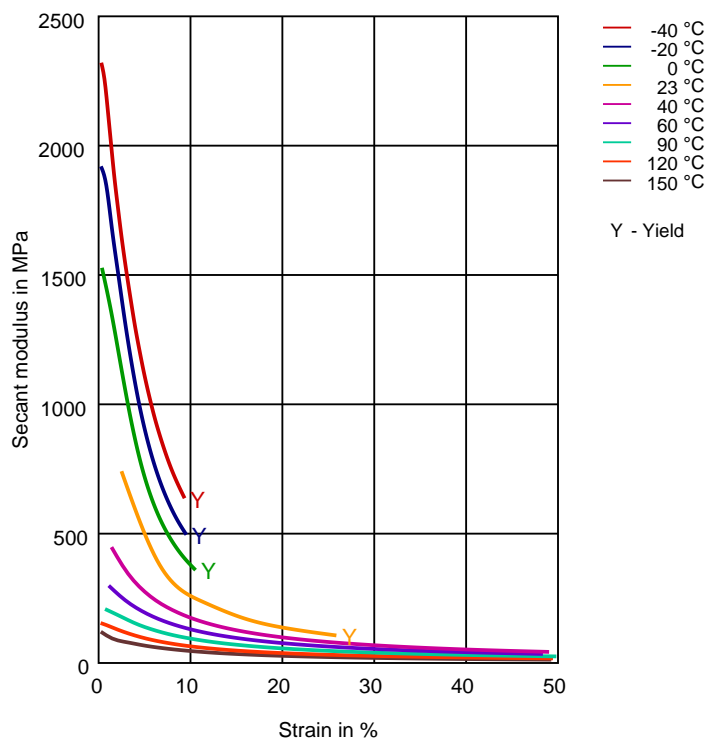
Europe/Middle East/Africa



DuPont™ Zytel® LCBM6301 BK010 (Preliminary Data)

NYLON RESIN

Secant modulus-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

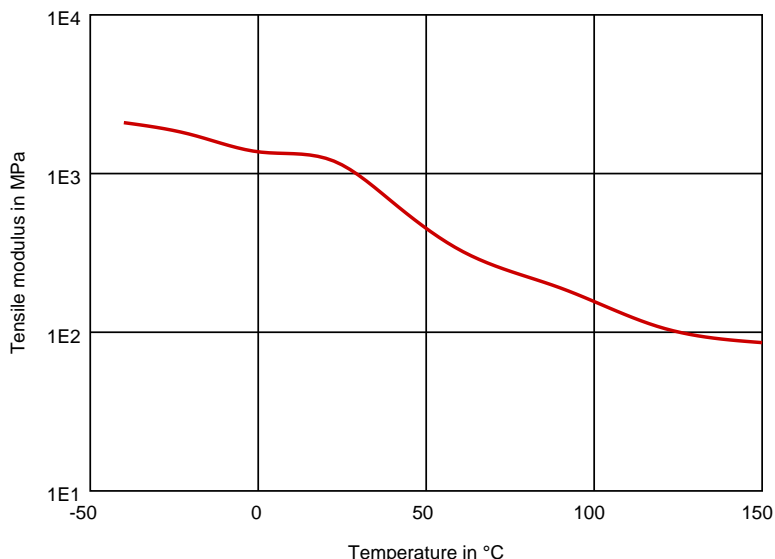
Europe/Middle East/Africa



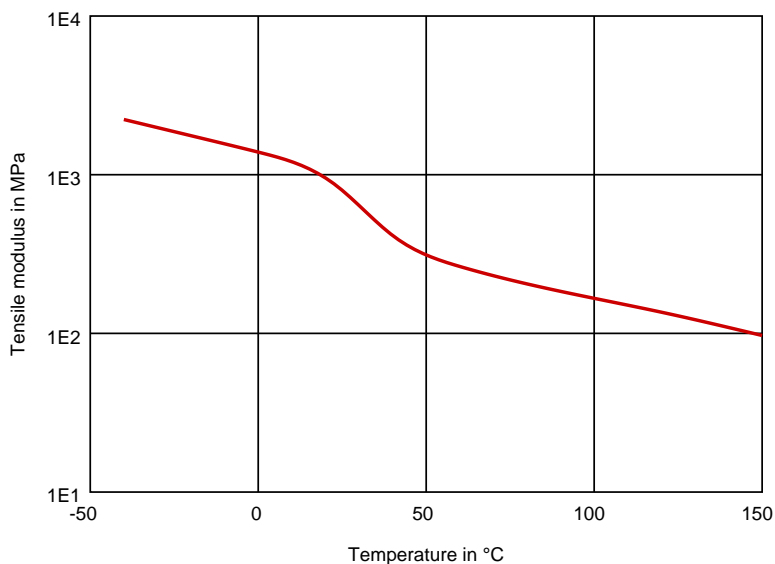
DuPont™ Zytel® LCBM6301 BK010 (Preliminary Data)

NYLON RESIN

Tensile modulus-temperature (dry)



Tensile modulus-temperature (cond.)



The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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

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

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® LCBM6301 BK010 (Preliminary Data)

NYLON RESIN

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

