

DuPont™ Zytel® LC6200 BK385

NYLON RESIN

Product Information

DuPont™ Zytel® LC6200 LC6200 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® LC6200 grades is targeted for a range of performance characteristics, balancing temperature resistance, flexibility and low permeation.

Zytel® LC6200 BK385 is a toughened polyamide 612 resin for extrusion applications.

General information	Value	Unit	Test Standard
Resin Identification	PA612-HI	-	ISO 1043
Part Marking Code	PA612-HI	-	ISO 11469
Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Abrasion resistance	12 / *	mm ³	ISO 4649
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	1080 / 720	MPa	ISO 527-1/-2
Yield stress	33 / 28	MPa	ISO 527-1/-2
Yield strain	20 / 30	%	ISO 527-1/-2
Nominal strain at break	>50 / >50	%	ISO 527-1/-2
Strain at Break, 23°C, 50mm/min	300 / 290	%	ISO 527-1/-2
Charpy notched impact strength			ISO 179/1eA
73°F	40 / 80	kJ/m ²	
-22°F	15 / 15	kJ/m ²	
Izod notched impact strength			ISO 180/1A
73°F	27 / 66	kJ/m ²	
-22°F	13 / 13	kJ/m ²	
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 18°F/min	218 / *	°C	ISO 11357-1/-3
Temp. of deflection under load			ISO 75-1/-2
260 psi	46 / *	°C	
65 psi	85 / *	°C	
Thermal conductivity of melt	0.17	W/(m K)	-
Spec. heat capacity of melt	2700	J/(kg K)	-
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
Density	1000 / -	kg/m ³	ISO 1183
Density of melt	820	kg/m ³	-
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	240	°C	-
Melt Temperature Range	235 - 250	°C	-

Characteristics

Processing	<ul style="list-style-type: none"> Injection Molding Film Extrusion 	<ul style="list-style-type: none"> Profile Extrusion Sheet Extrusion 	<ul style="list-style-type: none"> Other Extrusion
Delivery form	<ul style="list-style-type: none"> Pellets 		
Special characteristics	<ul style="list-style-type: none"> Heat stabilized or stable to heat 		
Regional Availability	<ul style="list-style-type: none"> North America Europe 	<ul style="list-style-type: none"> Asia Pacific South and Central America 	<ul style="list-style-type: none"> Near East/Africa Global

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

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

Tel: +41 22 717 51 11

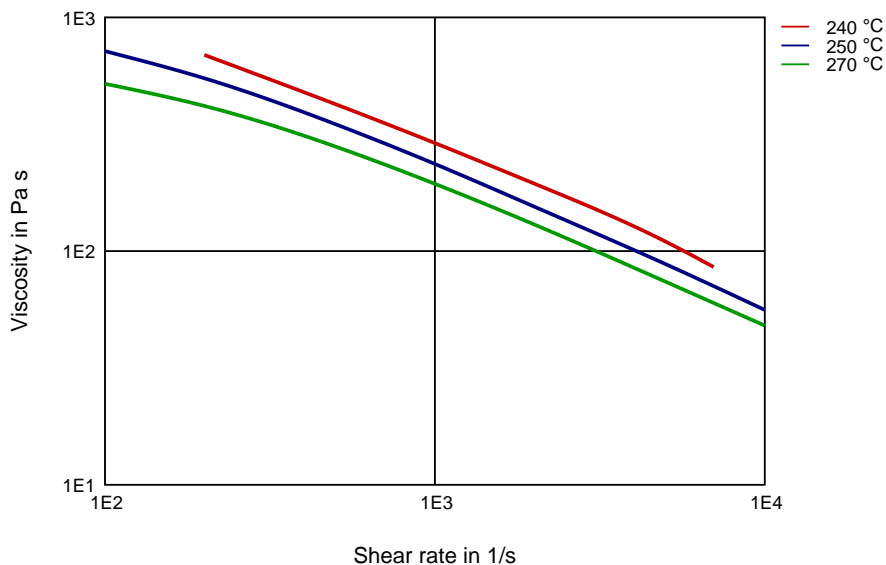


DuPont™ Zytel® LC6200 BK385

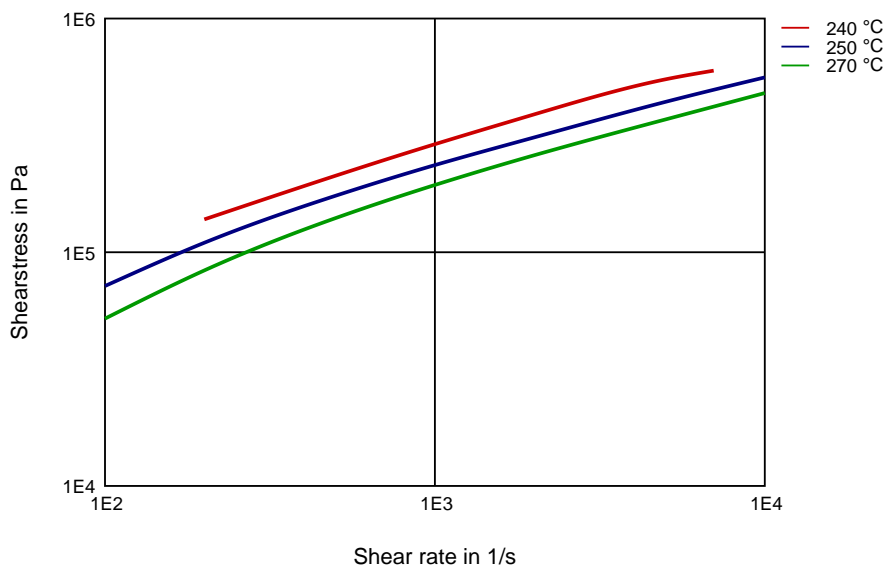
NYLON RESIN

Diagrams

Viscosity-shear rate



Shearstress-shear rate



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

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

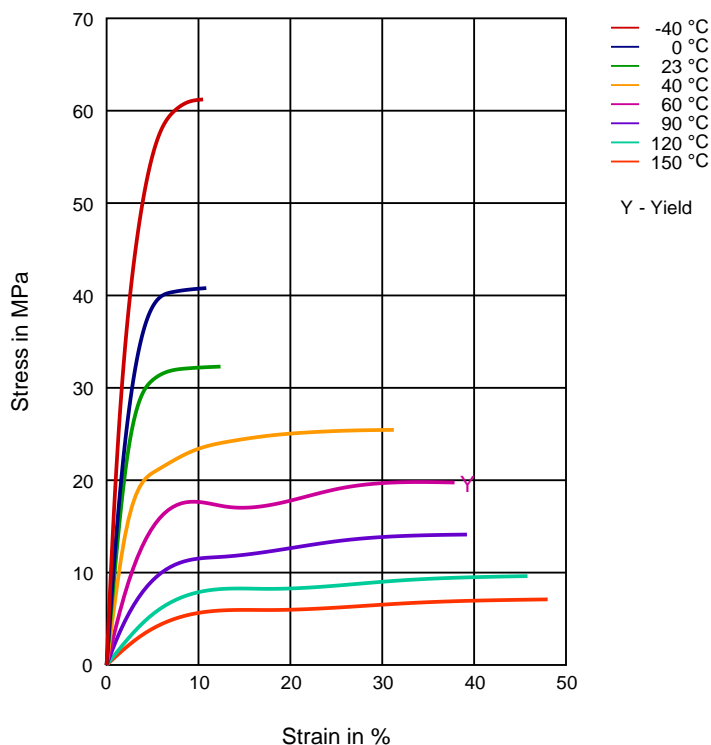
Tel: +41 22 717 51 11



DuPont™ Zytel® LC6200 BK385

NYLON RESIN

Stress-strain (dry)



Revised: 2017-08-17

Page: 3 of 8

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

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

Tel: +41 22 717 51 11

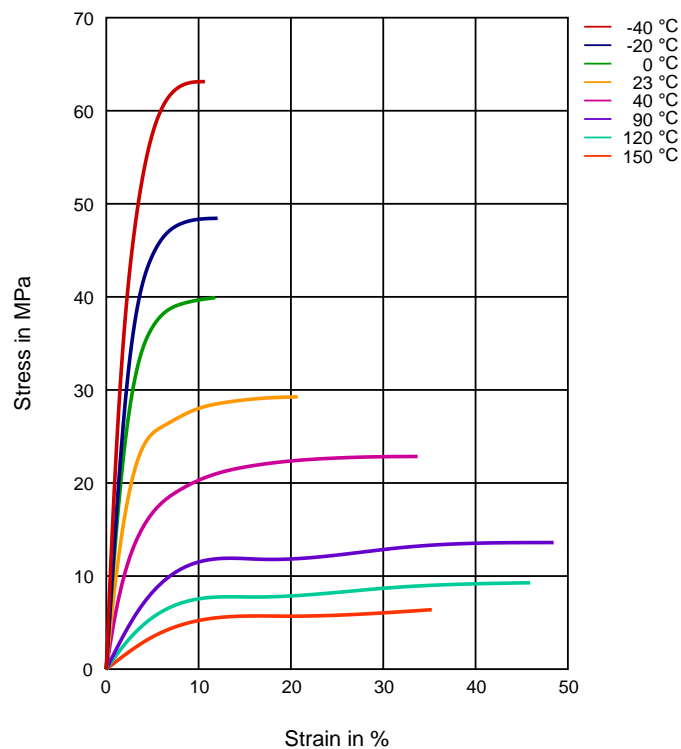
Copyright 2017 DuPont. The DuPont Oval Logo is a trademark or registered trademark of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.



DuPont™ Zytel® LC6200 BK385

NYLON RESIN

Stress-strain (cond.)



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

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

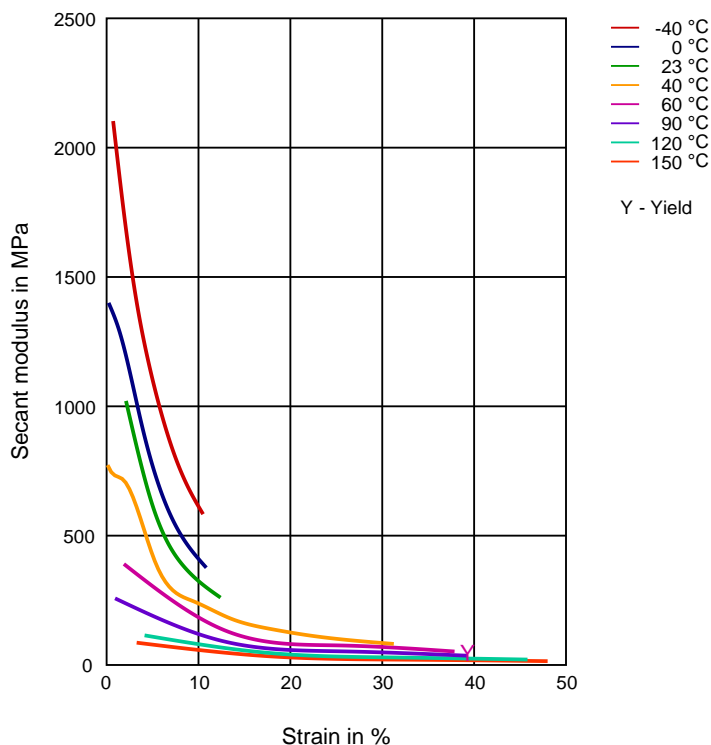
Tel: +41 22 717 51 11



DuPont™ Zytel® LC6200 BK385

NYLON RESIN

Secant modulus-strain (dry)



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

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

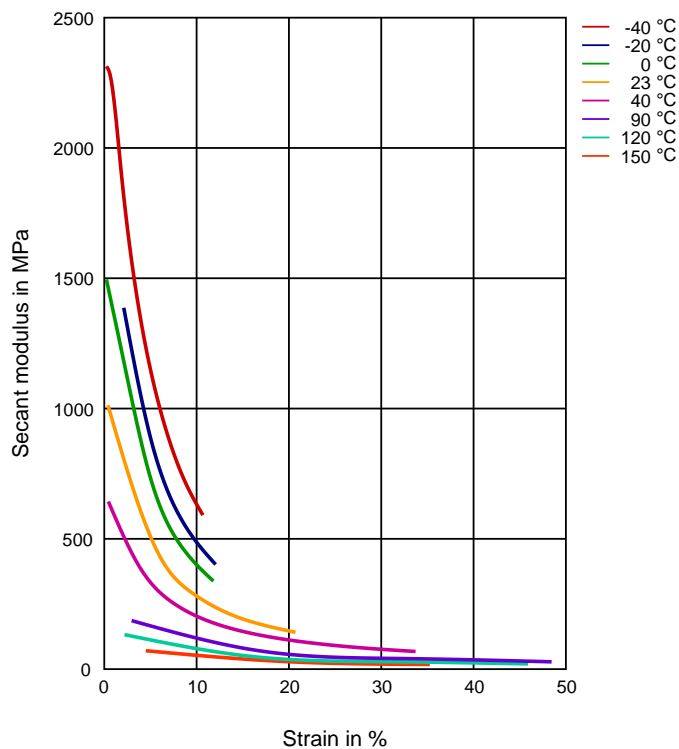
Tel: +41 22 717 51 11



DuPont™ Zytel® LC6200 BK385

NYLON RESIN

Secant modulus-strain (cond.)



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

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

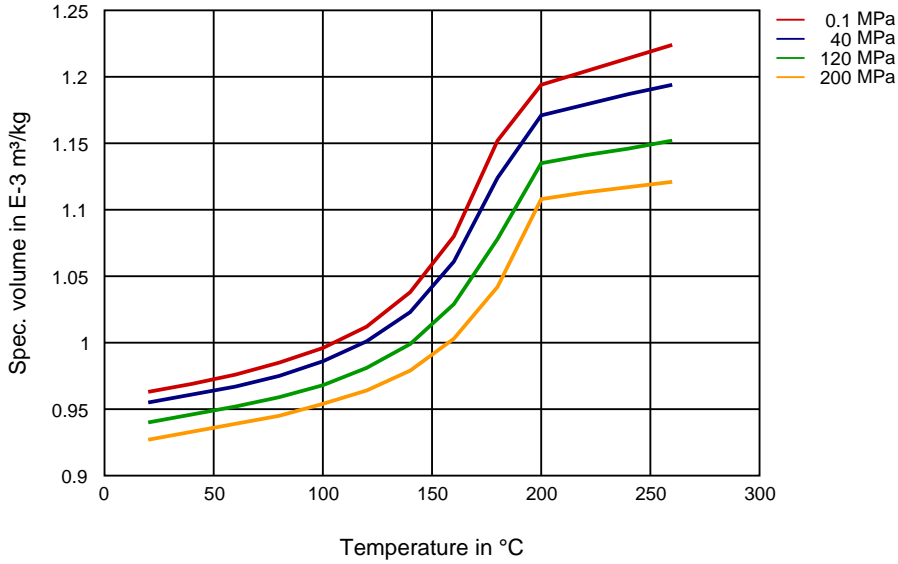
Tel: +41 22 717 51 11



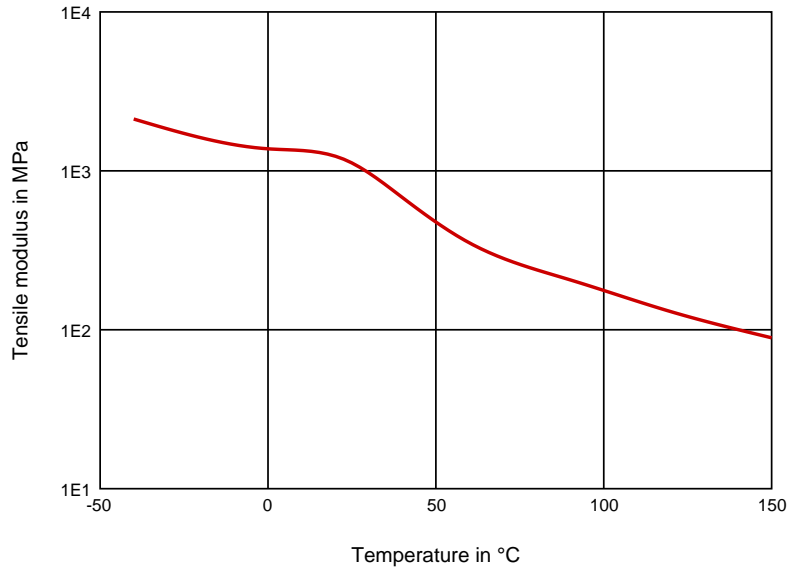
DuPont™ Zytel® LC6200 BK385

NYLON RESIN

Specific volume-temperature (pvT)



Tensile modulus-temperature (dry)



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

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

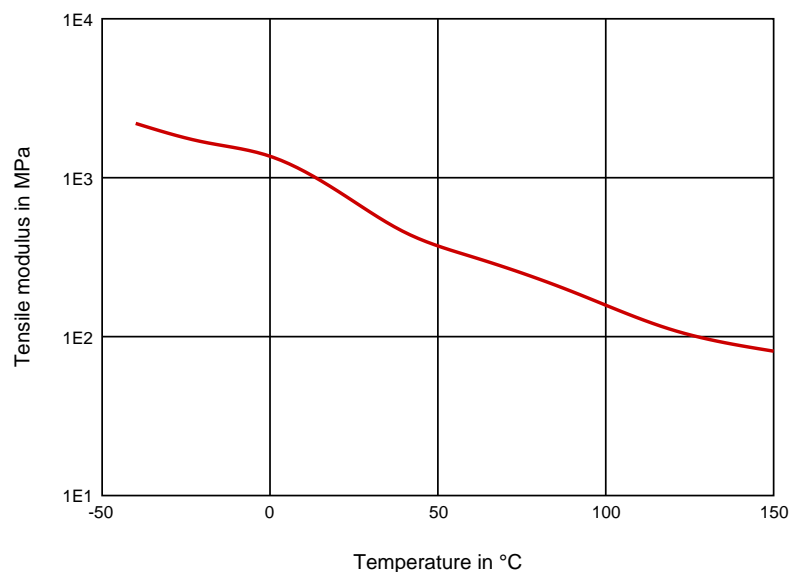
Tel: +41 22 717 51 11



DuPont™ Zytel® LC6200 BK385

NYLON RESIN

Tensile modulus-temperature (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.

Revised: 2017-08-17

Page: 8 of 8

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

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

Tel: +41 22 717 51 11



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.