

DuPont™ Zytel® RS LCFG3060 NC010

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.

DuPont™ Zytel® RS LCPA resins contain between 20% and 100% renewably sourced material (by weight) derived from castor beans.

Zytel® RS LCFG3060 NC010 is a renewably sourced polyamide 610 containing a minimum of 60% renewably sourced ingredient by weight. It is an unreinforced, medium viscosity grade, developed for extrusion applications and for consideration into applications in contact with food.

FOOD CONTACT

This product is manufactured according to Good Manufacturing Practice (GMP) principles and generally accepted in food contact applications in Europe and the USA when meeting applicable use conditions. For details, individual compliance statements are available from your DuPont representative.

General information	Value	Unit	Test Standard
Resin Identification	PA610	-	ISO 1043
Part Marking Code	PA610	-	ISO 11469
Rheological properties	dry / cond	Unit	Test Standard
Viscosity number	150 / *	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
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	2000 / 1200	MPa	ISO 527-1/-2
Yield stress	58 / -	MPa	ISO 527-1/-2
Yield strain	5 / -	%	ISO 527-1/-2
Nominal strain at break	>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
Charpy notched impact strength			ISO 179/1eA
73°F	6.8 / -	kJ/m ²	
-40°F	8.7 / -	kJ/m ²	
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 18°F/min	223 / *	°C	ISO 11357-1/-3
Temp. of deflection under load, 260 psi	55 / *	°C	ISO 75-1/-2
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	1.4 / *	%	Sim. to ISO 62
Water absorption, 80mil	3.3 / *	%	Sim. to ISO 62
Density	1070 / -	kg/m ³	ISO 1183
Injection	Value	Unit	Test Standard
Drying Time, Dehumidified Dryer	2 - 4	h	-
Processing Moisture Content	≤0.1	%	-
Melt Temperature Optimum	250	°C	-
Min. melt temperature	230	°C	-
Max. melt temperature	290	°C	-
Mold Temperature Optimum	70	°C	-
Min. mold temperature	50	°C	-
Max. mold temperature	90	°C	-
Extrusion	Value	Unit	Test Standard
Drying Temperature	≤80	°C	-
Drying Time, Dehumidified Dryer	3 - 4	h	-
Processing Moisture Content	≤0.06	%	-

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

North America

Asia Pacific

Europe/Middle East/Africa

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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	

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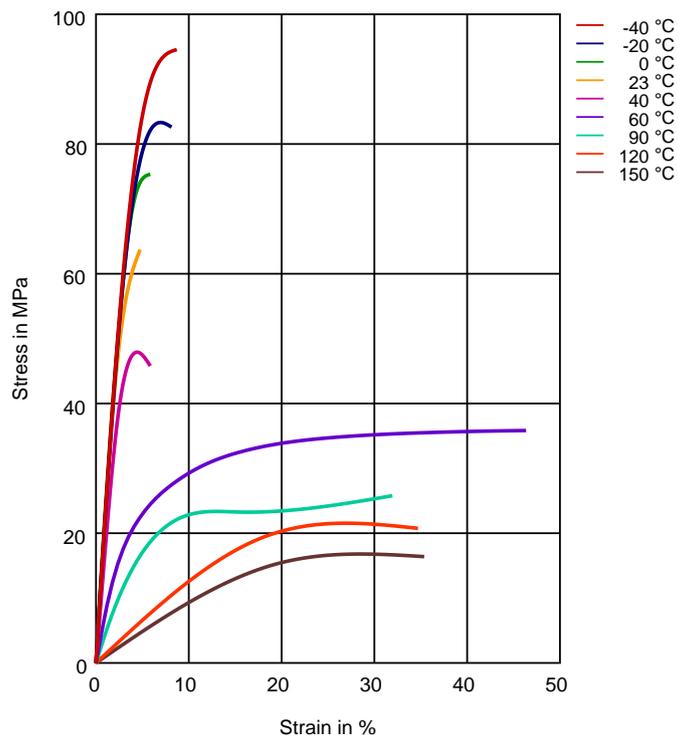


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Diagrams

Stress-strain (dry)



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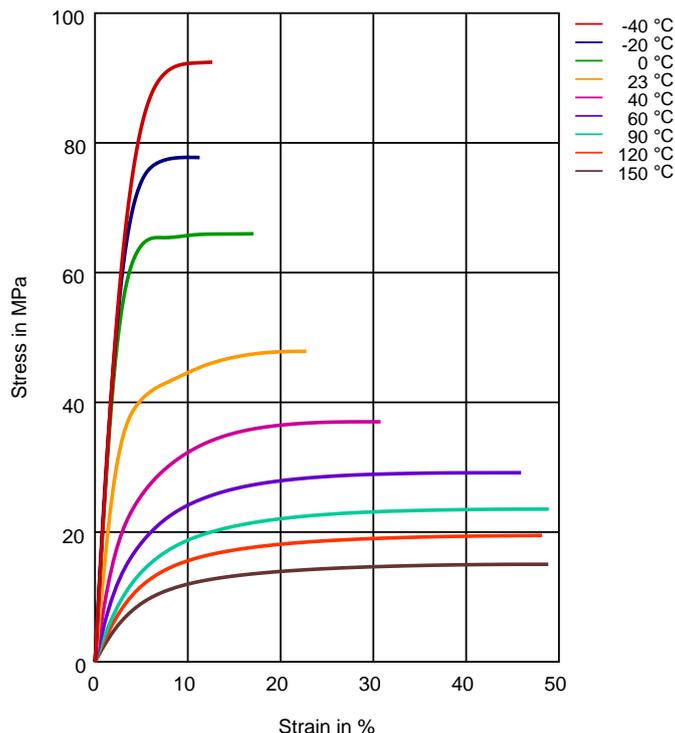
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Stress-strain (cond.)



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.

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