

DuPont™ Zytel® RS 32CG20HSL BK409

NYLON RESIN

Product Information

Zytel® RS 32CG20HSL is a 20% carbon/glass fiber reinforced, heat stabilized, lubricated, biobased polyamide 610 resin.

General information	Value	Unit	Test Standard
Resin Identification	PA610-(CF+GF)20	-	ISO 1043
Part Marking Code	>PA610-(CF+GF)20	-	ISO 11469
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Rheological properties	dry / cond	Unit	Test Standard
Viscosity number	145 / *	cm ³ /g	ISO 307, 1157, 1628
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	11000 / 8000	MPa	ISO 527-1/-2
Stress at break	150 / 110	MPa	ISO 527-1/-2
Strain at break	5 / 5	%	ISO 527-1/-2
Flexural Modulus	9900 / -	MPa	ISO 178
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 18° F/min	224 / *	°C	ISO 11357-1/-3
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
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	1.1 / *	%	Sim. to ISO 62
Density	1140 / -	kg/m ³	ISO 1183
Injection	Value	Unit	Test Standard
Drying Recommended	yes	-	-
Drying Temperature	≥80	°C	-
Drying Time, Dehumidified Dryer	3 - 4	h	-
Processing Moisture Content	≤0.1	%	-
Melt Temperature Optimum	280	°C	-
Min. melt temperature	270	°C	-
Max. melt temperature	290	°C	-
Mold Temperature Optimum	80	°C	-
Min. mold temperature	60	°C	-
Max. mold temperature	100	°C	-

Characteristics

Processing	• Injection Molding	• Profile Extrusion
Delivery form	• Pellets	
Additives	• Release agent	
Special characteristics	• Static dissipative	• Heat stabilized or stable to heat

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

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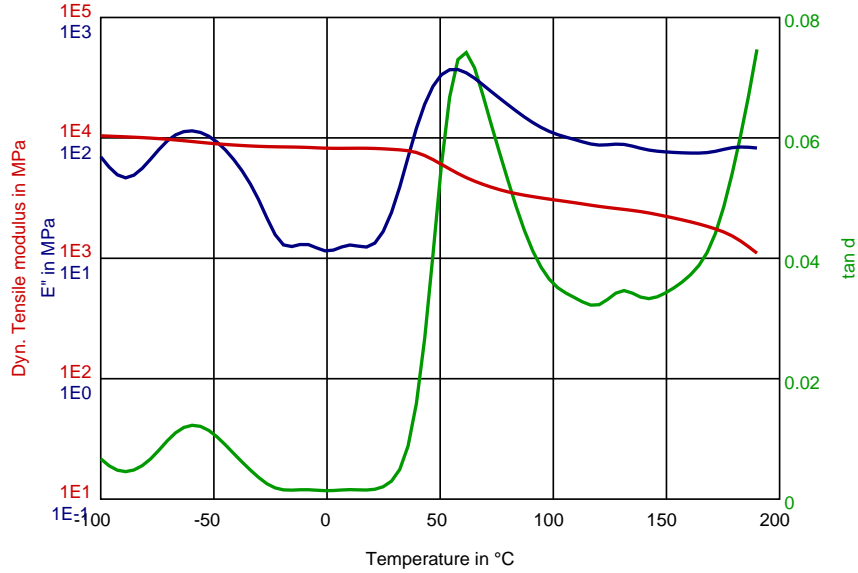


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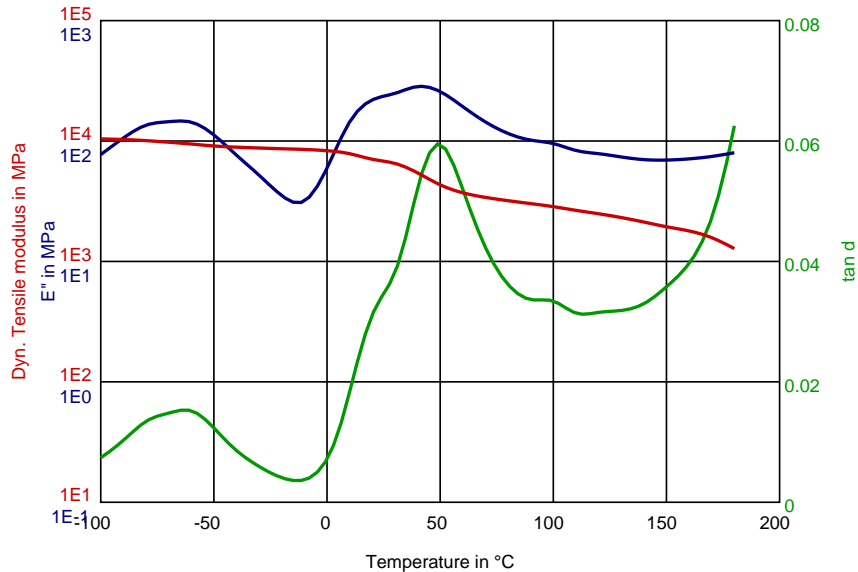
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Diagrams

Dynamic Tensile modulus-temperature (dry)



Dynamic Tensile modulus-temperature (cond.)



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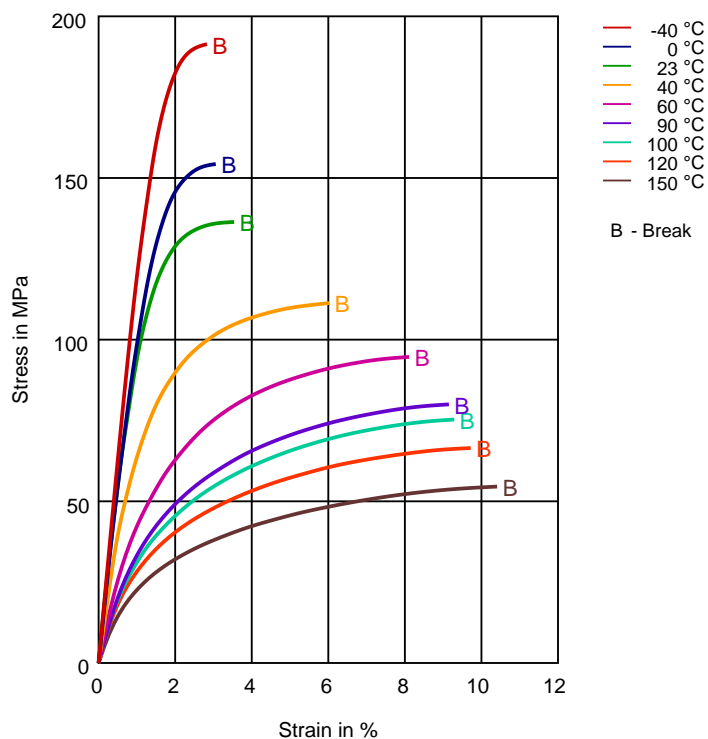
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Stress-strain (dry)



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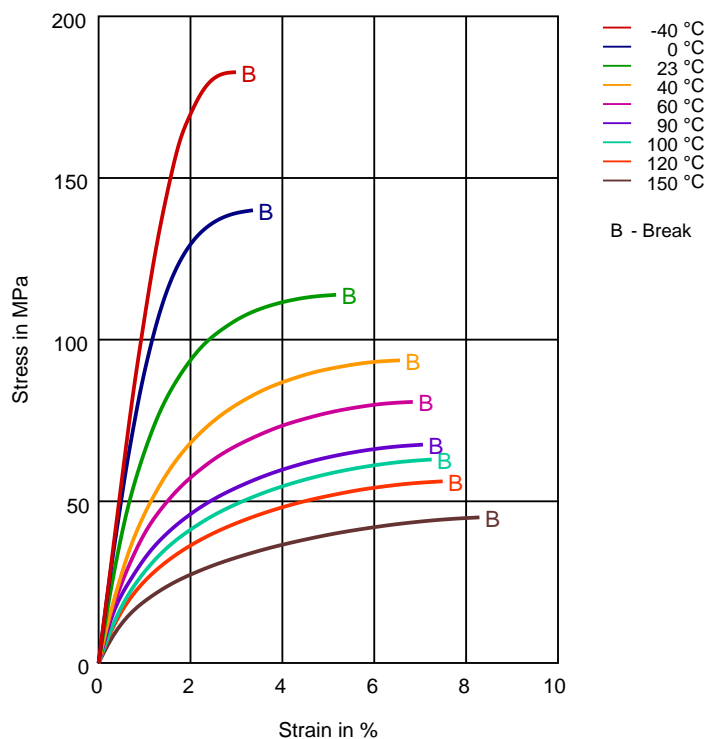
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Stress-strain (cond.)



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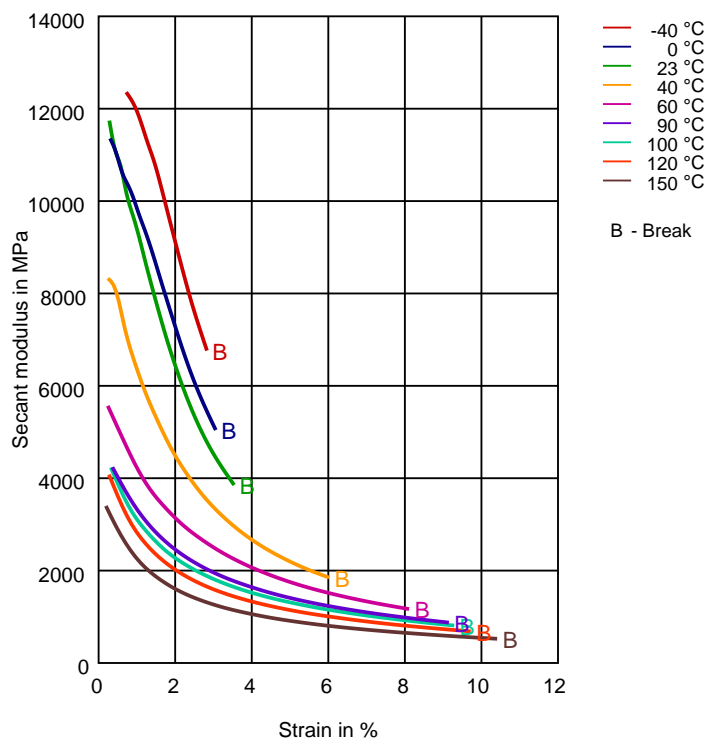
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Secant modulus-strain (dry)



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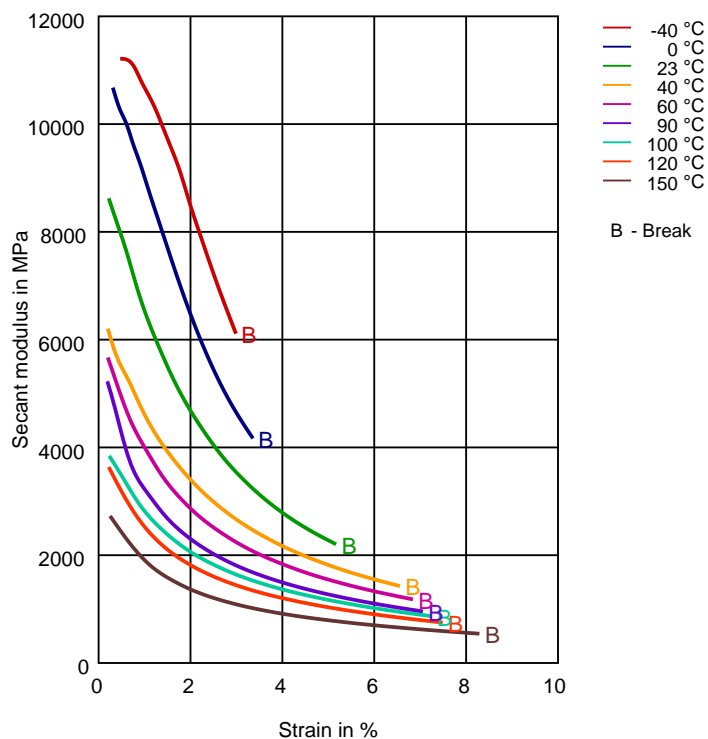
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Secant modulus-strain (cond.)



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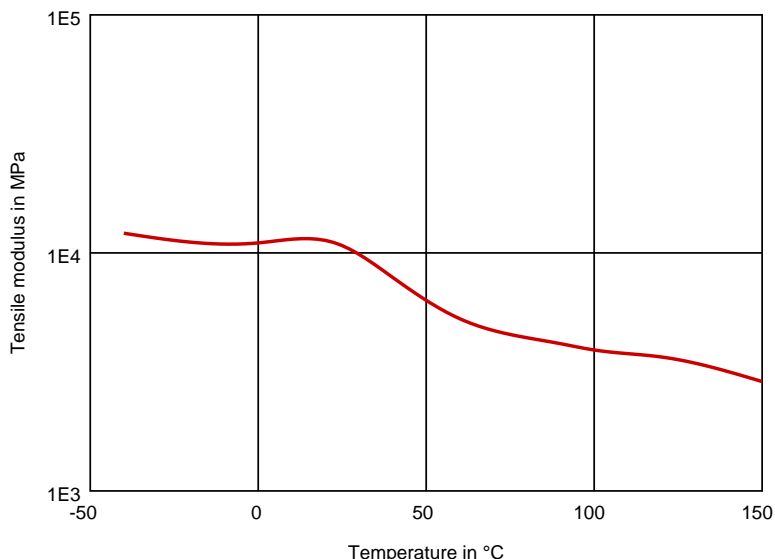
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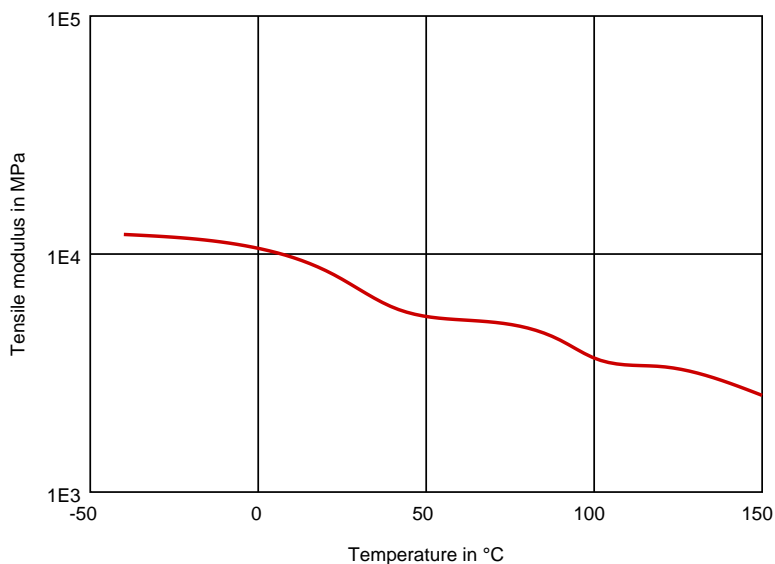
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Tensile modulus-temperature (dry)



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.

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