CELSTRAN® PA66-GF40-02 AD3002 BLACK

CELSTRAN® Long Fibre

40% Long glass fiber reinforced, heat stabilized, Nylon 6/6

Product information

Resin Identification	PA66-LGF40	ISO 1043
Part Marking Code	>PA66-LGF40<	ISO 11469

Typical mechanical properties

	dry/cond.		
Tensile modulus	1.99E6 / 1.61E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	29000 / 23100	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.8 / 2	%	ISO 527-1/-2
Flexural modulus	1.74E6 / 1.33E6	psi	ISO 178
Flexural strength	45000 / 35500	psi	ISO 178
Charpy impact strength, 23 °C	26.2 / 31.9	ftlb/in²	ISO 179/1eU
Charpy impact strength, -30 °C	24.7 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23 °C	11.9 / 9.99	ftlb/in²	ISO 179/1eA
Charpy notched impact strength, -30 °C	13.3 / -	ftlb/in²	ISO 179/1eA

Thermal properties

	dry/cond.		
Temperature of deflection under load, 1.8 MPa	498 / *	°F	ISO 75-1/-2
Temperature of deflection under load, 8 MPa	464 / *	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.08 / *	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.461 / *	E-4/°F	ISO 11359-1/-2

Physical/Other properties

	dry/cond.		
Density	0.0527 / -	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	176	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	563	°F
Min. melt temperature	545	°F
Max. melt temperature	581	°F
Max. screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	212	°F
Min. mold temperature	158	°F
Max. mold temperature	248	°F
Hold pressure range	7250 - 14500	psi
Hold Pressure Time (h is the max. wall thickness of the part in mm)	h^2+2	s

Revised: 2025-05-15 Source: Celanese Materials Database

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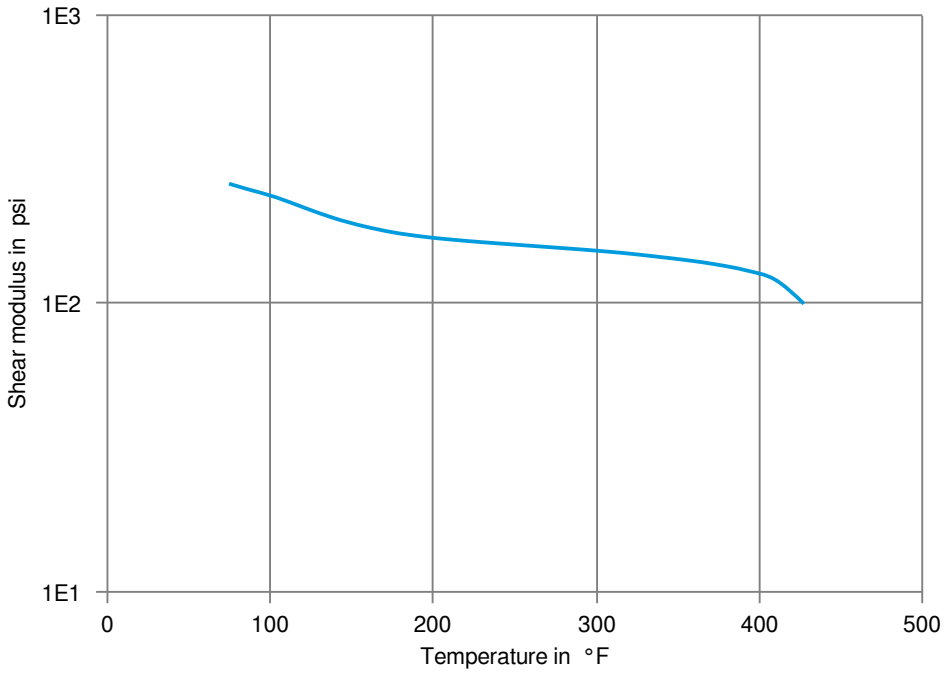
Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Ford	WSB-M4D678-A	
General Motors	GMW17810P-PA66-GF40	Black

Characteristics

Processing	Injection Molding
Special characteristics	Heat stabilized or stable to heat

Dynamic Shear modulus-temperature

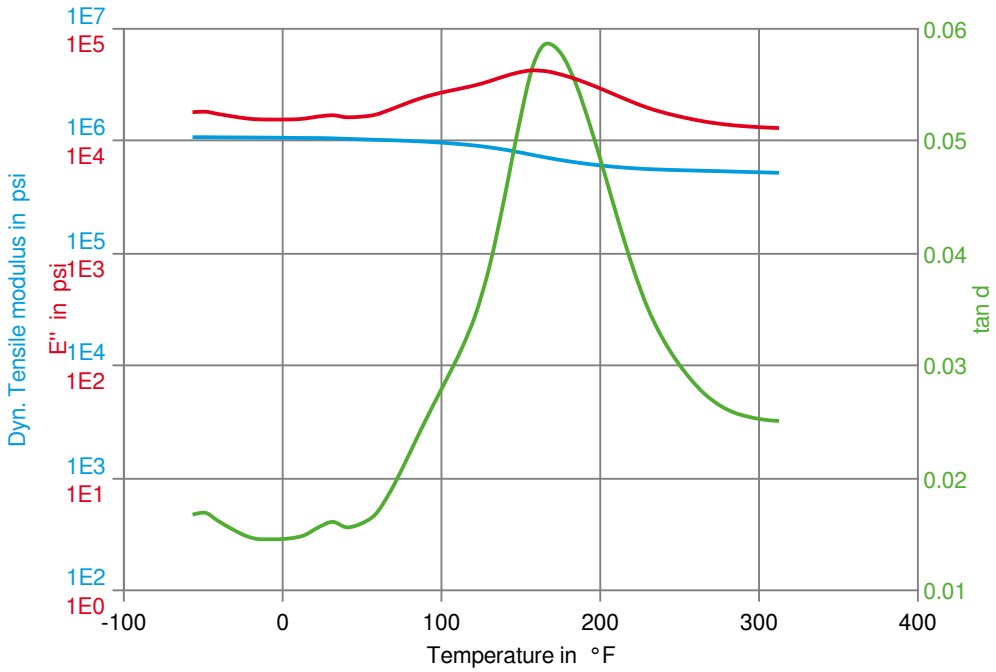


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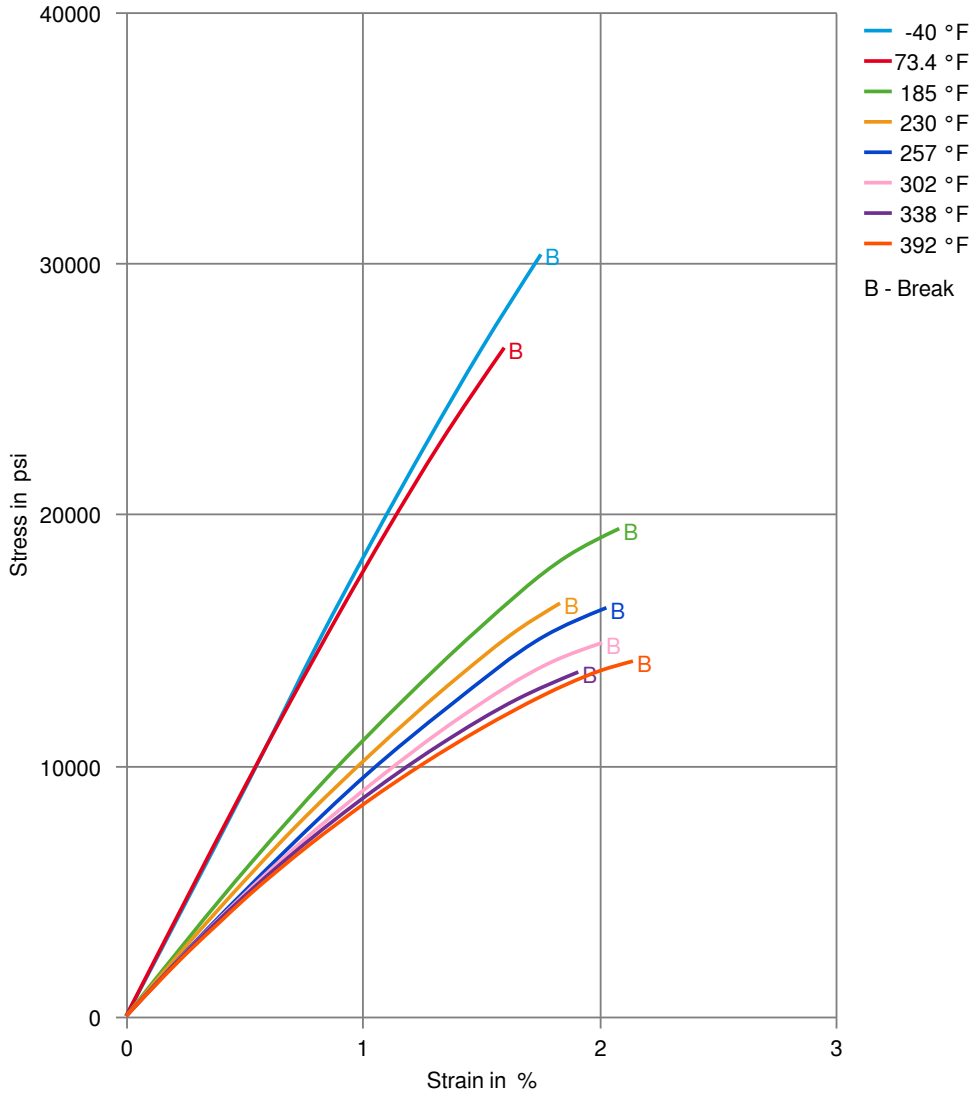
Dynamic Tensile modulus-temperature (dry)



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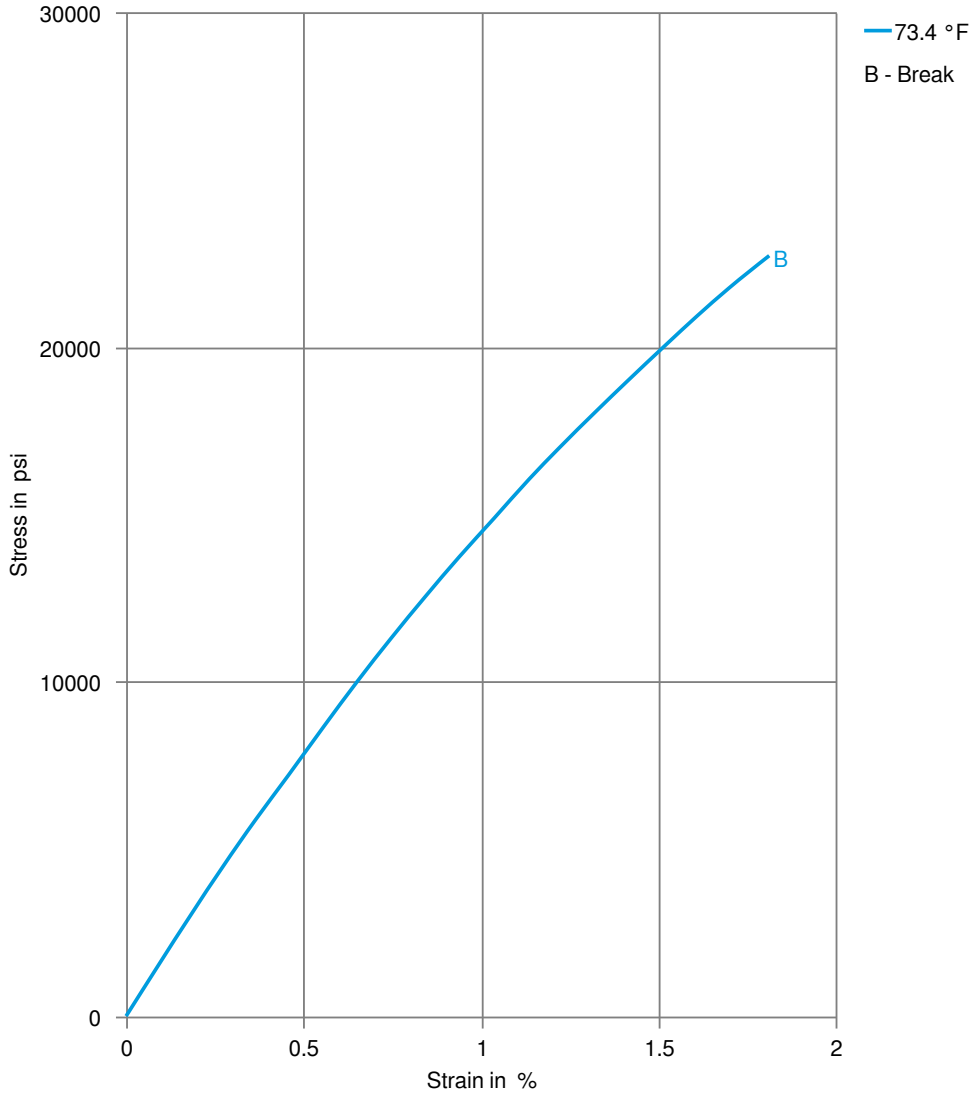
Stress-strain (dry)



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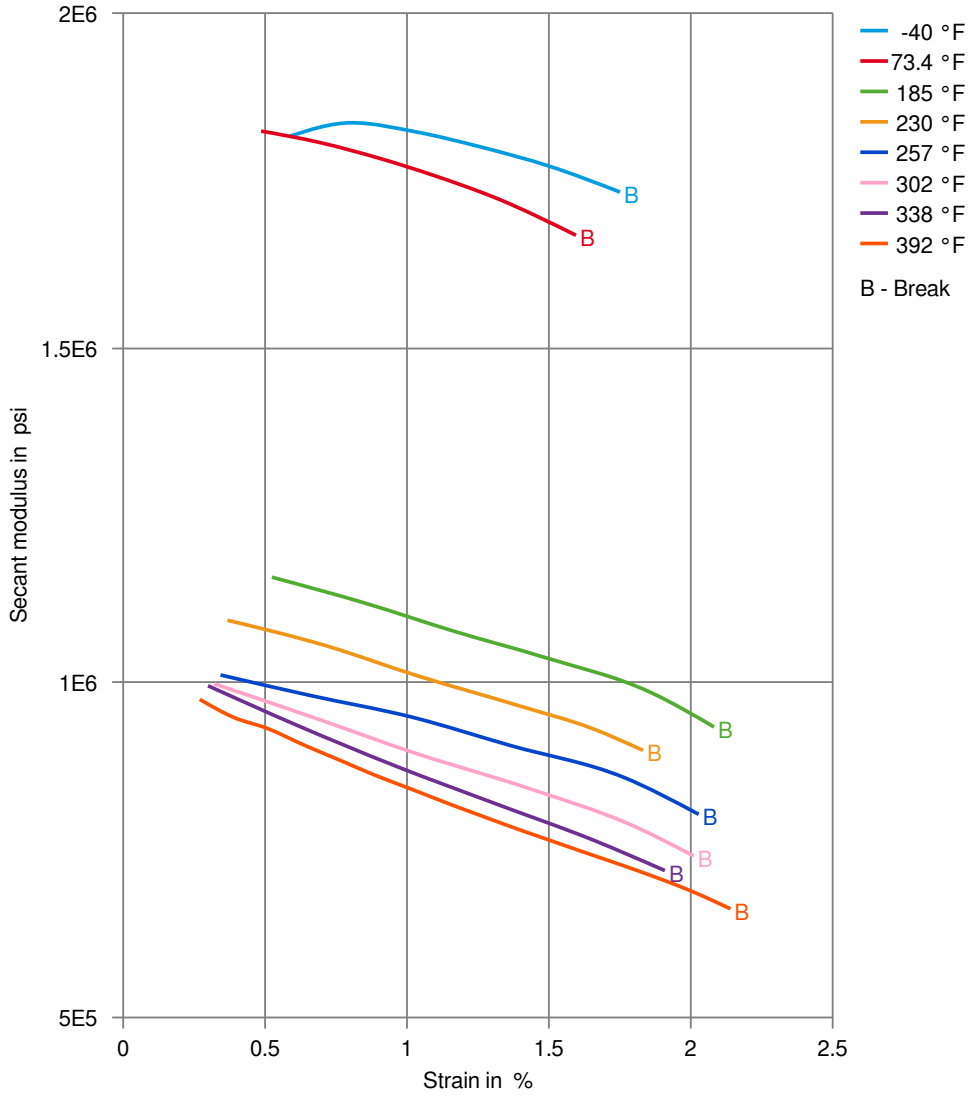
Stress-strain (cond.)



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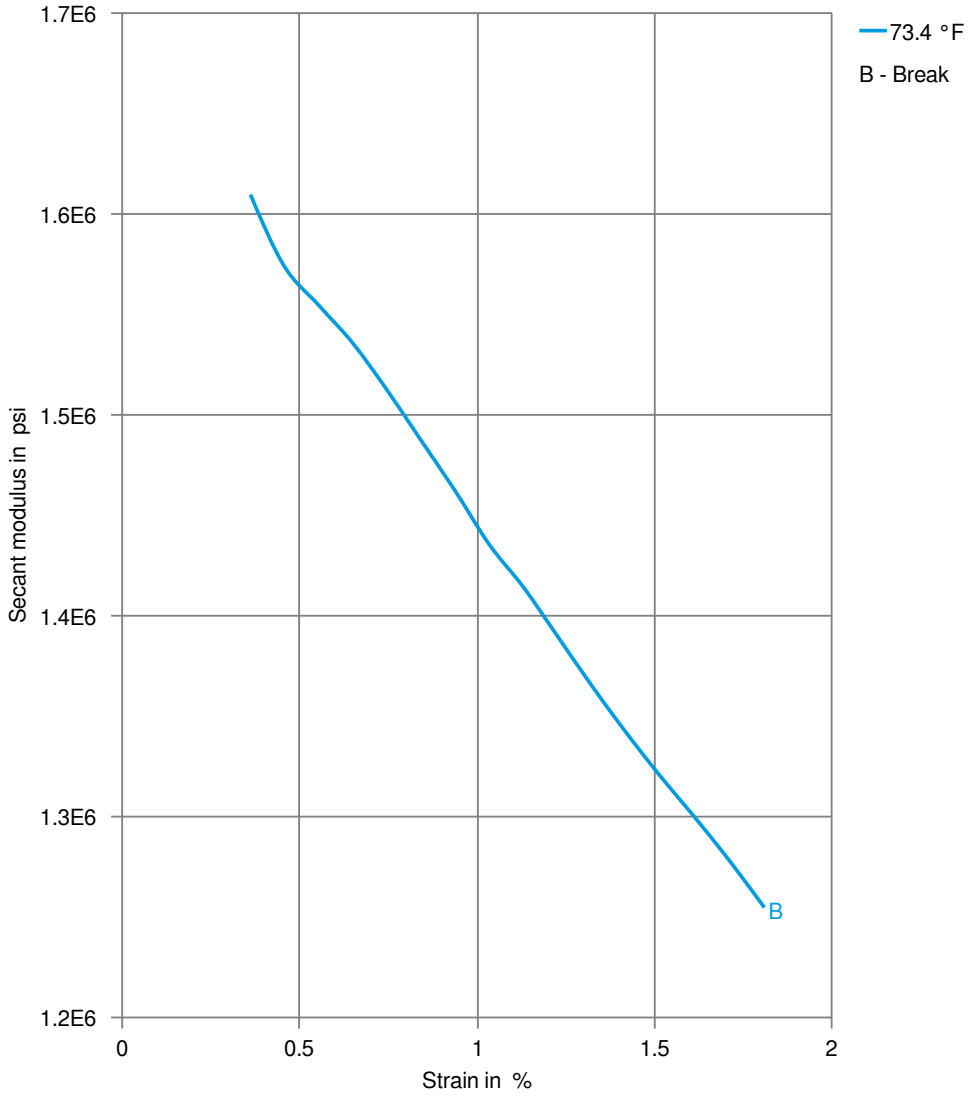
Secant modulus-strain (dry)



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Secant modulus-strain (cond.)



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