Celanese
The chemistry inside innovation™

FORTRON® FX650T6

Polyphenylene sulfide

Fortron FX650T6 is a 50% glass-fiber and mineral reinforced grade with improvedimpact and heat shock resistance.

Product information

Resin Identification	PPS-(GF+MD)50		ISO 1043
Part Marking Code	>PPS-(GF+MD)50<		ISO 11469

Rheological properties

Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	1.77E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	18900	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2	%	ISO 527-1/-2
Flexural modulus	1.74E6	psi	ISO 178
Flexural strength	26100	psi	ISO 178
Charpy impact strength, 23°C	19.7	ftlb/in²	ISO 179/1eU
Charpy impact strength, -30°C	22.7	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	4.28	ftlb/in²	ISO 179/1eA
Charpy notched impact strength, -30°C	3.81	ftlb/in²	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	536	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	518	°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	0.278	E-4/°F	ISO 11359-1/-2

Electrical properties

Volume resistivity	>1E13	Ohm.m	IEC 62631-3-1

Physical/Other properties

Water absorption, 2mm	0.07	%	Sim. to ISO 62
Density	0.0614	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	266	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.02	%
Melt Temperature Optimum	626	°F
Min. melt temperature	590	°F
Max. melt temperature	644	°F
Max. screw tangential speed	0.2 - 0.3	m/s
Mold Temperature Optimum	248	°F

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Min. mold temperature	176	°F
Max. mold temperature	320	°F
Hold pressure range	4350 - 10200	psi
Ejection temperature	428	°F

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Stellantis	B62 0300 / 61/222E/220M+/C2B/C5	01378_20_04006

Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified, High Flow

Additional information

Processing Notes

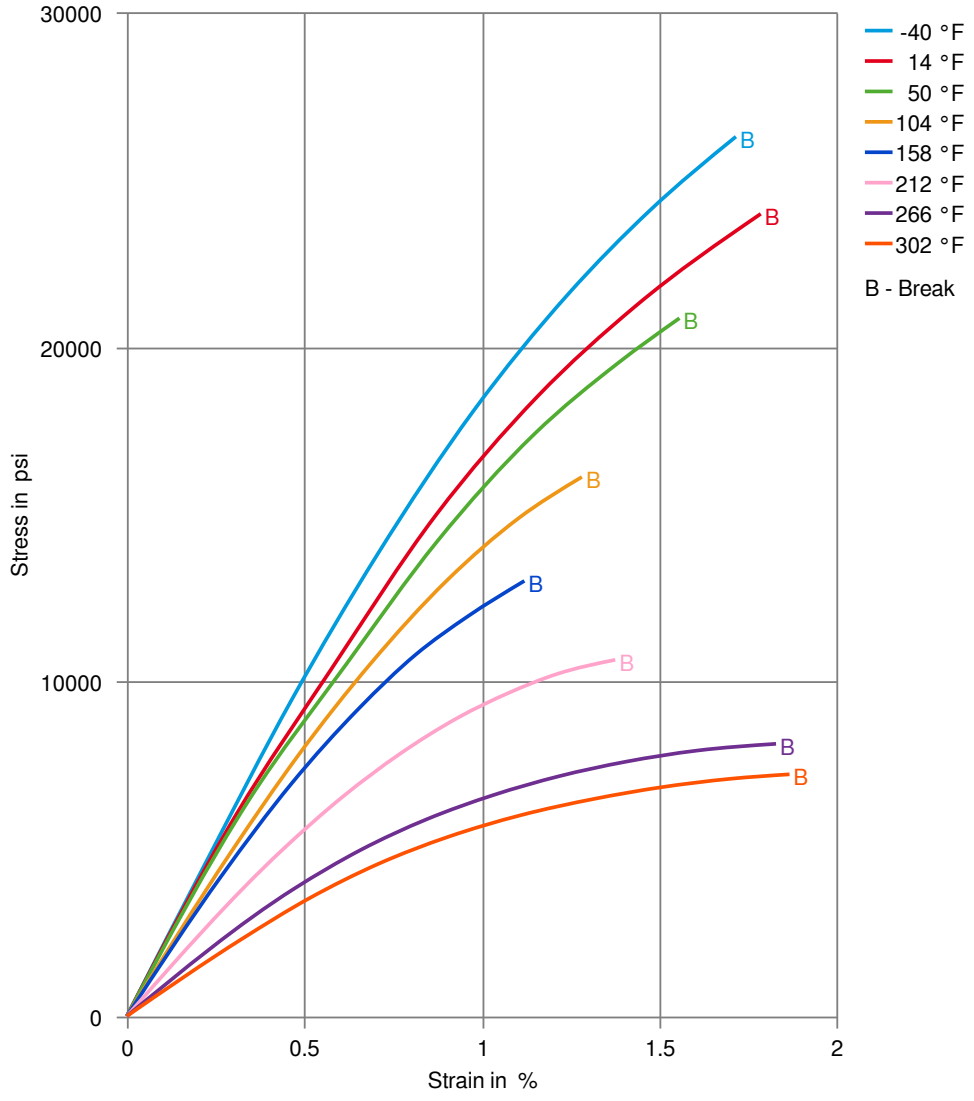
Pre-Drying

Fortron should, in principle, be pre-dried. Because of the necessary low maximum residual moisture content, the use of dry air dryers is recommended. The dew point should be <= -30 °C. the time between drying and processing should be as short as possible.

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Stress-strain

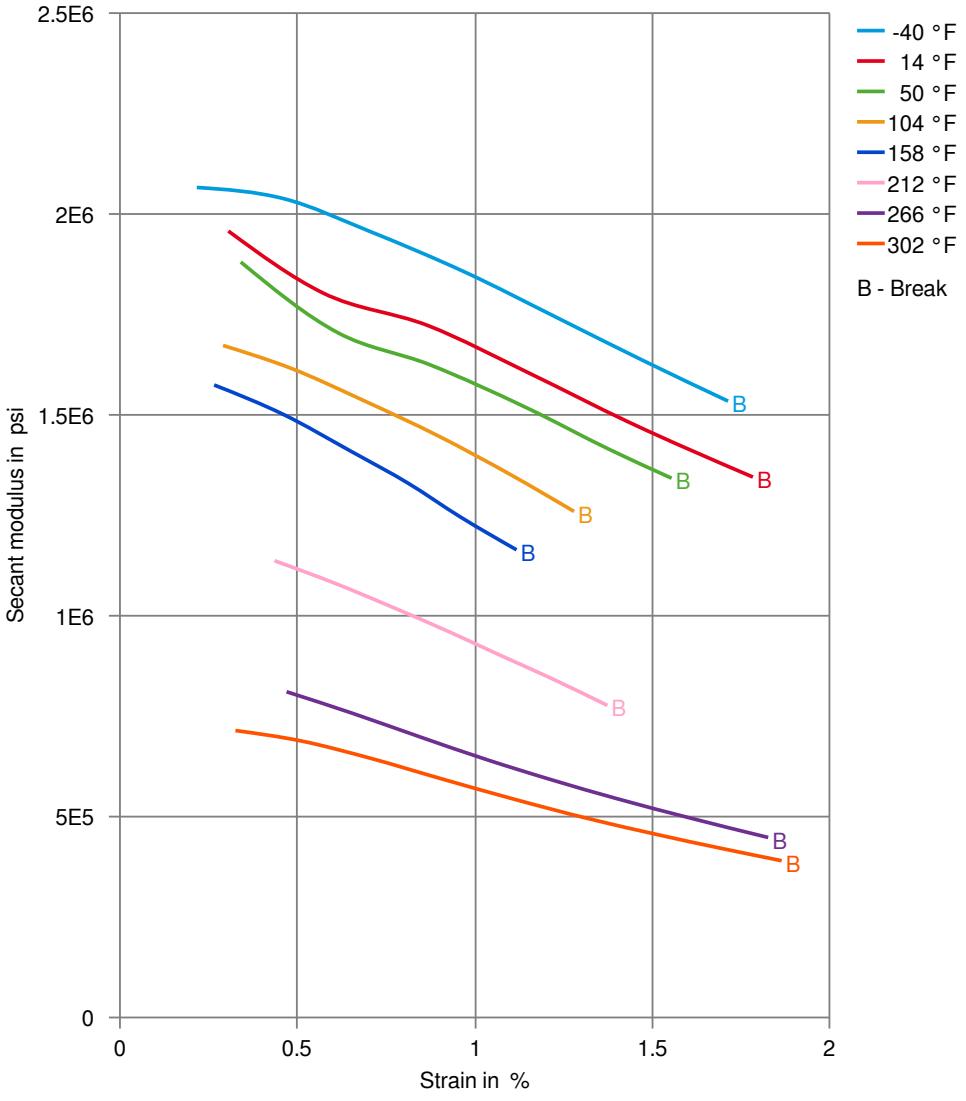


Revised: 2026-09-08 Source: Celanese Materials Database

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Secant modulus-strain



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