FORTRON® 1140T4

Polyphenylene sulfide

Fortron® 1140T4 is a 40% glass filled, impact modified grade for injection molding with good thermal shock resistance.

Product information

Resin Identification	PPS-I-GF40	ISO 1043
Part Marking Code	>PPS-I-GF40<	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	2.1E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	26800	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.1	%	ISO 527-1/-2
Flexural modulus	2.1E6	psi	ISO 178
Flexural strength	39200	psi	ISO 178
Charpy impact strength, 23°C	28.5	ftlb/in²	ISO 179/1eU
Charpy impact strength, -30°C	23.8	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	6.66	ftlb/in²	ISO 179/1eA
Charpy notched impact strength, -30°C	5.71	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	6.66	ftlb/in²	ISO 180/1A
Izod notched impact strength, -30°C	5.71	ftlb/in²	ISO 180/1A
Izod impact strength, 23°C	26.2	ftlb/in²	ISO 180/1U
Izod impact strength, -30°C	23.8	ftlb/in²	ISO 180/1U

Thermal properties

Melting temperature, 10°C/min	536	°F	ISO 11357-1/-3
Glass transition temperature, 10°C/min	194	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	509	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.09	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.267	E-4/°F	ISO 11359-1/-2

Flammability

Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.0315	in	IEC 60695-11-10
Glow Wire Flammability Index, 1.0mm	1760[OT]	°F	IEC 60695-2-12
Glow Wire Flammability Index, 2.0mm	1760[OT]	°F	IEC 60695-2-12
Glow Wire Ignition Temperature, 1.0mm	1520[OT]	°F	IEC 60695-2-13
Glow Wire Ignition Temperature, 2.0mm	1560[OT]	°F	IEC 60695-2-13

[OT]: One time tested

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

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Electrical properties

Volume resistivity	>1E13	Ohm.m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	711	kV/in	IEC 60243-1

Physical/Other properties

Density	0.0581	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	302	°F
Min. mold temperature	284	°F
Max. mold temperature	320	°F
Hold pressure range	4350 - 10200	psi
Back pressure	435	psi
Ejection temperature	415	°F

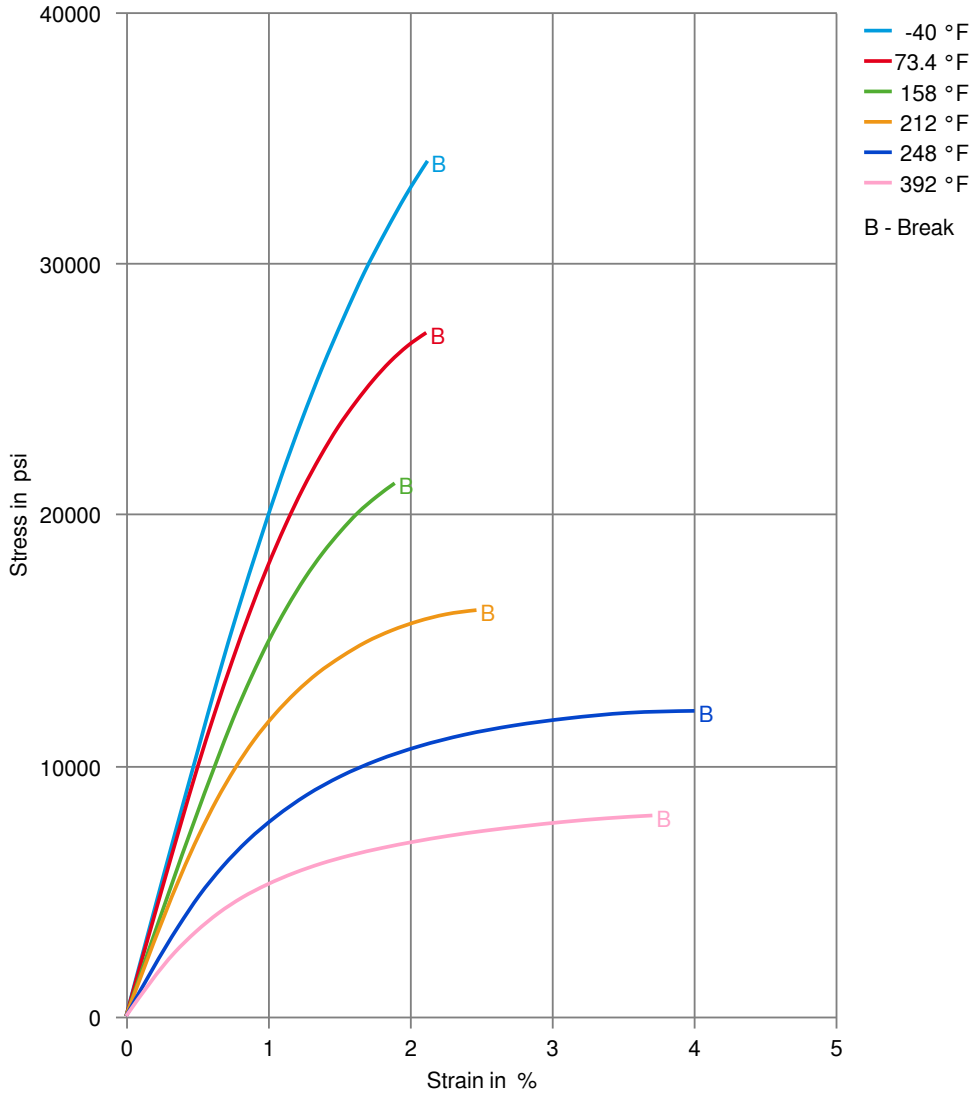
Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified, Thermal shock resistant

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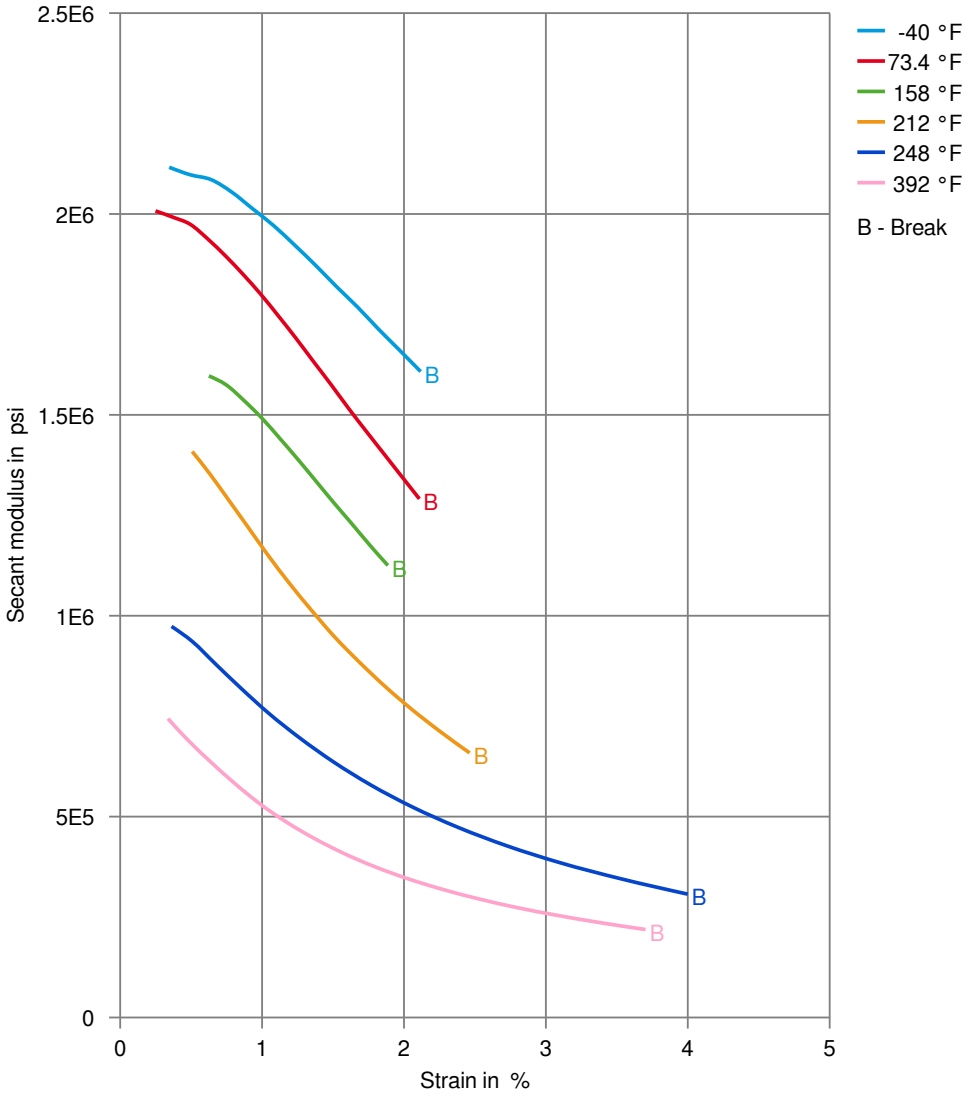
Stress-strain



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Secant modulus-strain



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