

FORTRON® FX650T6 - PPS

Description

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

Physical properties	Value	Unit	Test Standard
Density	106	lb/ft ³	ISO 1183
Molding shrinkage, parallel (flow)	0.3	%	ISO 294-4, 2577
Molding shrinkage, transverse normal	0.5	%	ISO 294-4, 2577
Water absorption, 23°C-sat	0.07	%	Sim. to ISO 62

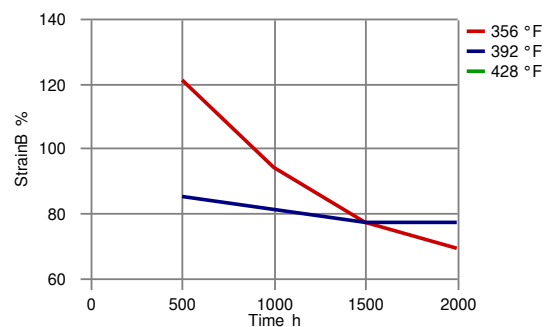
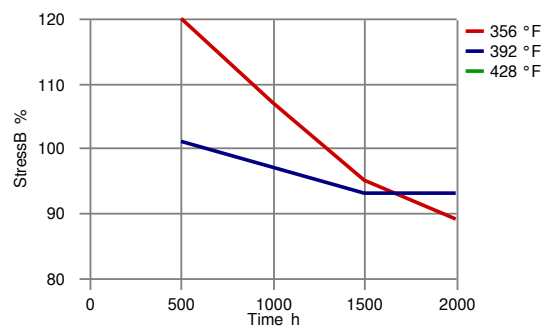
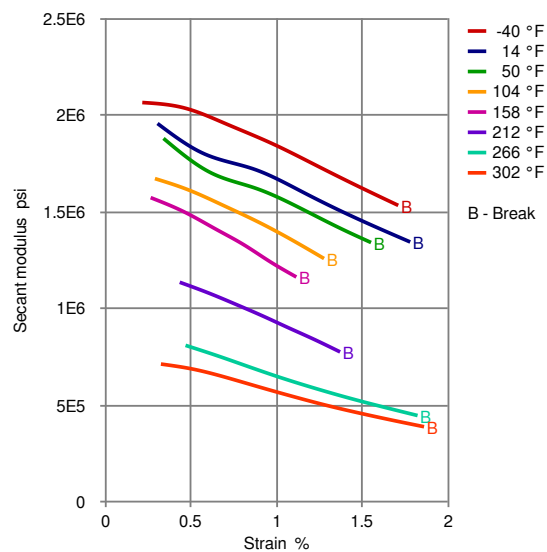
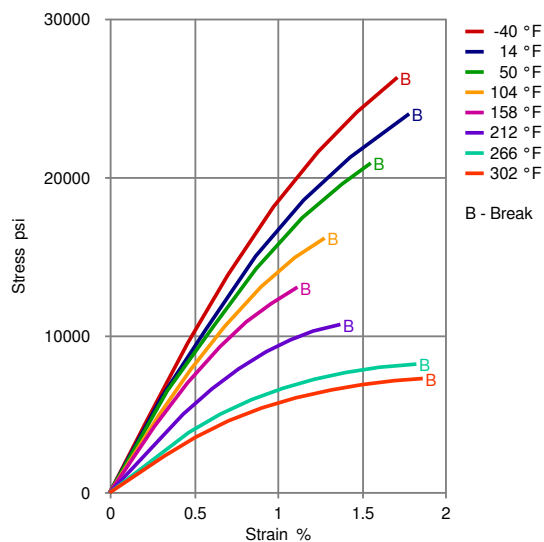
Mechanical properties	Value	Unit	Test Standard
Tensile modulus	1.77E6	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	18900	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	2	%	ISO 527-1, -2
Flexural modulus, 23°C	1.74E6	psi	ISO 178
Flexural strength, 23°C	26100	psi	ISO 178
Charpy impact strength, 23°C	19.7	ft-lb/in ²	ISO 179/1eU
Charpy impact strength, -30°C	22.7	ft-lb/in ²	ISO 179/1eU
Charpy notched impact strength, 23°C	4.28	ft-lb/in ²	ISO 179/1eA
Charpy notched impact strength, -30°C	3.81	ft-lb/in ²	ISO 179/1eA

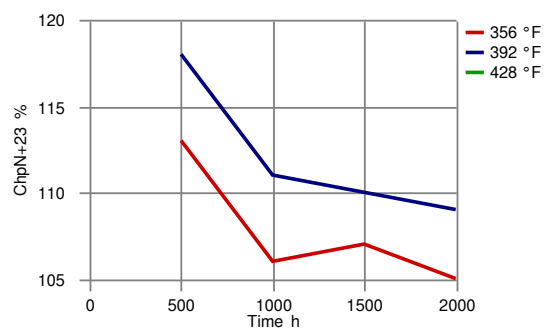
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	536	°F	ISO 11357-1/-3
DTUL at 1.8 MPa	518	°F	ISO 75-1, -2
Coeff. of linear therm expansion, parallel	0.0833	E-4/°F	ISO 11359-2
Coeff. of linear therm expansion, normal	0.278	E-4/°F	ISO 11359-2

Electrical properties	Value	Unit	Test Standard
Volume resistivity, 23°C	>1E13	Ohm*m	IEC 62631-3-1
Comparative tracking index	PLC 4	-	UL 746

Diagrams







Typical injection moulding processing conditions

Pre Drying

	Value	Unit
Drying time	3 - 4	h
Drying temperature	266 - 284	°F

Temperature

	Value	Unit
Hopper temperature	68 - 86	°F
Feeding zone temperature	140 - 176	°F
Zone1 temperature	554 - 572	°F
Zone2 temperature	590 - 608	°F
Zone3 temperature	626 - 644	°F
Zone4 temperature	626 - 644	°F
Nozzle temperature	590 - 626	°F
Melt temperature	626 - 644	°F
Mold temperature	284 - 320	°F
Hot runner temperature	626 - 644	°F

Screw Speed

	Value	Unit
Screw speed diameter, 25mm	120	RPM
Screw speed diameter, 40mm	75	RPM
Screw speed diameter, 55mm	50	RPM

Characteristics

Special Characteristics

High flow

Product Categories

Impact modified, Mineral/Glass reinforced

Processing

Injection molding

