

FORTRON® FX530T4 - PPS

Description

30% glass filled, impact modified, injection molding PPS

FORTRON(R) FX530T4 is a 30% glass filled, impact modified grade for injection molding with good thermal shock resistance

Physical properties	Value	Unit	Test Standard
Density	93.6	lb/ft ³	ISO 1183

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	1.45E6	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	21000	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	2	%	ISO 527-1, -2
Flexural modulus, 23°C	1.41E6	psi	ISO 178
Flexural strength, 23°C	29700	psi	ISO 178
Charpy notched impact strength, 23°C	4.76	ft-lb/in ²	ISO 179/1eA
Charpy notched impact strength, -30°C	4.28	ft-lb/in ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	500	°F	ISO 75-1, -2

Electrical properties	Value	Unit	Test Standard
Volume resistivity, 23°C	>2E14	Ohm*m	IEC 62631-3-1
Volume resistivity at high temperature	4E9	Ohm*m	IEC 62631-3-1
Temperature	356	°F	-
Surface resistivity, 23°C	>1E11	Ohm	IEC 62631-3-2
Surface resistivity at high temperature	>1E11	Ohm	IEC 62631-3-2
Temperature	356	°F	-
Electric strength, 23°C (AC)	533	kV/in	IEC 60243-1
Electric strength at high temperature (AC)	584	kV/in	IEC 60243-1
Temperature	356	°F	-
Electric strength, 23°C (DC)	1020	kV/in	IEC 60243-2
Electric strength at high temperature (DC)	864	kV/in	IEC 60243-2
Temperature	356	°F	-
CTI 100 drops	125	V	IEC 60112

Typical injection moulding processing conditions

Pre Drying	Value	Unit
Necessary low maximum residual moisture content	0.02	%
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



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Pressure	Value	Unit
Back pressure max.	30	bar
Speed	Value	
Injection speed	fast	
Screw Speed	Value	Unit
Screw speed diameter, 25mm	120	RPM
Screw speed diameter, 40mm	75	RPM
Screw speed diameter, 55mm	50	RPM

Other text information

Pre-drying

Pre-drying conditions:

FORTRON PPS 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.

Characteristics

Product Categories	Glass reinforced, Impact modified
Processing	Injection molding

