

FORTRON® FX515T1 - PPS

Description

15% glass filled, toughened, injection molding grade

Fortron® FX515T1 is a 15% glass filled, impact modified PPS grade with good impact resistance suitable for injection molding and food contact applications

Physical properties	Value	Unit	Test Standard
Density	85.5	lb/ft ³	ISO 1183
Molding shrinkage, parallel (flow)	0.6	%	ISO 294-4, 2577
Molding shrinkage, transverse normal	0.3	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	870228	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	14500	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	2.1	%	ISO 527-1, -2
Flexural modulus, 23°C	841000	psi	ISO 178
Flexural strength, 23°C	21800	psi	ISO 178
Flexural strain at break	3.1	%	ISO 178
Charpy impact strength, 23°C	19	ft-lb/in ²	ISO 179/1eU
Charpy notched impact strength, 23°C	4.76	ft-lb/in ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	428	°F	ISO 75-1, -2

Typical injection moulding processing conditions

Pre Drying	Value	Unit
Necessary low maximum residual moisture content	0.05	%
Drying time	3 - 4	h
Drying temperature	250	°F

Temperature	Value	Unit
Feeding zone temperature	151 - 160	°F
Zone1 temperature	579 - 590	°F
Zone2 temperature	595 - 601	°F
Zone3 temperature	595 - 601	°F
Zone4 temperature	570 - 590	°F
Nozzle temperature	570 - 590	°F
Melt temperature	≤608	°F
Mold temperature	241 - 250	°F

Pressure	Value	Unit
Back pressure max.	35	bar

Speed	Value
Injection speed	slow-medium

Screw Speed	Value	Unit
Screw speed diameter, 40mm	45	RPM



FORTRON® FX515T1 - PPS

Other text information

Pre-drying

Fortron should 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 deg C. the time between drying and processing should be as short as possible. Normal drying time is 3-4 hrs at 121 deg C but for drying overnight temp should be reduced to 90 deg C.

Characteristics

Special Characteristics	Auto spec approved
Product Categories	Impact modified
Processing	Extrusion, Injection molding

Other Approvals

OEM	Specification
Renault	UB02b

