

FORTRON® 4332L6 - PPS

Description

Fortron 4332L6 is a glass fiber/mineral filled injection molding grade, which is intended for applications requiring improved tensile and flexural properties, when compared to other GF/MIN reinforced PPS grades. The recommended processing parameters are similar to the standard grades.

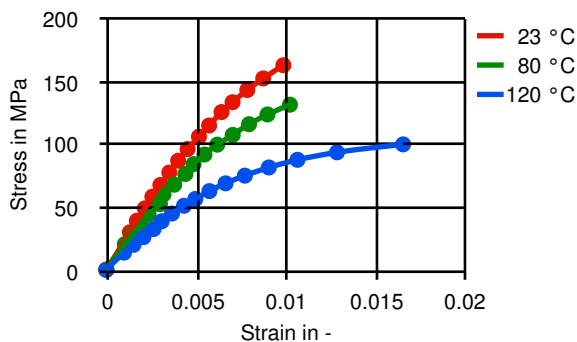
Physical properties	Value	Unit	Test Standard
Density	1950	kg/m ³	ISO 1183
Molding shrinkage, parallel	0.2 - 0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	0.3 - 0.7	%	ISO 294-4, 2577
Water absorption, 23°C-sat	0.02	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	22500	MPa	ISO 527-2/1A
Tensile stress at break, 5mm/min	160	MPa	ISO 527-2/1A
Tensile strain at break, 5mm/min	1.2	%	ISO 527-2/1A
Flexural modulus, 23°C	21000	MPa	ISO 178
Flexural strength, 23°C	260	MPa	ISO 178
Charpy impact strength, 23°C	30	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	6.5	kJ/m ²	ISO 179/1eA

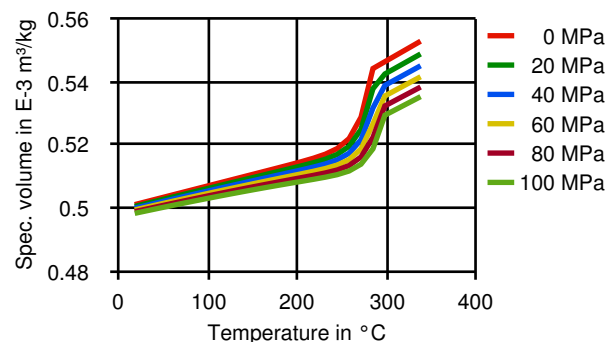
Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	270	°C	ISO 75-1, -2
DTUL at 8.0 MPa	220	°C	ISO 75-1, -2
Coeff. of linear therm expansion, parallel	0.14	E-4/°C	ISO 11359-2
Coeff. of linear therm expansion, normal	0.31	E-4/°C	ISO 11359-2

Diagrams

True Stress-strain



Moldflow Specific volume-temperature (pvT)



Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0.02	%	-
Drying time	3 - 4	h	-
Drying temperature	130 - 140	°C	-
Temperature	Value	Unit	Test Standard
Hopper temperature	20 - 30	°C	-
Feeding zone temperature	60 - 80	°C	-
Zone1 temperature	290 - 300	°C	-
Zone2 temperature	310 - 320	°C	-
Zone3 temperature	330 - 340	°C	-
Zone4 temperature	330 - 340	°C	-

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Nozzle temperature	310 - 330	°C	-
Melt temperature	330 - 340	°C	-
Mold temperature	140 - 160	°C	-
Hot runner temperature	330 - 340	°C	-
Pressure	Value	Unit	Test Standard
Back pressure max.	30	bar	-
Speed	Value	Unit	Test Standard
Injection speed	fast	-	-
Screw Speed	Value	Unit	Test Standard
Screw speed diameter, 25mm	120	RPM	-
Screw speed diameter, 40mm	75	RPM	-
Screw speed diameter, 55mm	50	RPM	-

Other text information

Injection molding

On injection molding machines with 15-25 D long three-section screws, as are usual in the trade, the FORTRON is processable. A shut-off nozzle is preferred to a free-flow nozzle.

Melt temperature 320-340 degC

Mold wall temperature at least 140 degC

A medium injection rate is normally preferred. All mold cavities must be effectively vented.

Characteristics

Product Categories

Mineral/Glass reinforced

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General Disclaimer

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