

Product Texts

Fortron 1130L4 is a 30% glass-reinforced PPS that has excellent heat and chemical resistance. It is inherently flame-retardant and exhibits high hardness and a good balance of strength and stiffness. Especially used for thin walled parts requiring long flow lengths. This grade also exhibits excellent weldability in secondary operations due to its low filler content.

Flammability @1.6mm nom. thickn. V-0 -
 Flammability at thickness h (0.8 mm) V-0 -

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.7	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	12000	MPa	ISO 527
^[C] Stress at break	170	MPa	ISO 527
^[C] Strain at break	1.9	%	ISO 527
^[C] Charpy impact strength, +23°C	34	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	34	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	9	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	9	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	90	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	255	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	29	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	52	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn. Thickness tested	V-0 1.5	class mm	IEC 60695-11-10 -
^[C] Burning Behav. at thickness h Thickness tested	V-0 0.8	class mm	IEC 60695-11-10 -

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.02	%	Sim. to ISO 62
^[C] Density	1580	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	130 - 140	°C	-
Pre-drying - Time	3 - 4	h	-
Melt temperature	320 - 340	°C	-
Mold temperature	≥140	°C	-

Characteristics**Processing**

Injection Molding

Features

Weldable

Delivery form

Pellets

Chemical Resistance

General Chemical Resistance

Additives

Lubricants

Regional Availability

North America, Europe, South and Central America, Near East/Africa

Special Characteristics

Flame retardant, Heat stabilized or stable to heat

Other text information**Injection molding**

Predrying in a dehumidified air dryer at 130 - 140 degC/3-4 hours is recommended.

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.

Tool temperature of at least 135 degC is recommended for parts to achieve maximum crystallizable potential.