

## FORTRON® 1115L0 - PPS

### Description

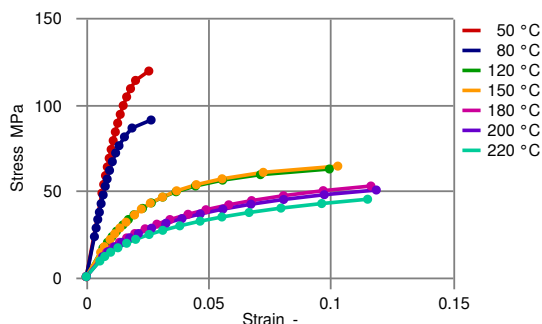
Fiberglass reinforced with high melt strength for blow molding & extrusion applications

Fortron® 1115L0 is a 15% fiberglass-reinforced grade of polyphenylene sulfide with high melt strength suitable for blow molding and extrusion applications. The recommended processing conditions are similar to those of our standard grades, except drying conditions are somewhat milder at 80 to 100 C for 3-4 hours.

Physical properties	Value	Unit	Test Standard
Density	1440	kg/m <sup>3</sup>	ISO 1183
Water absorption, 23°C-sat	0.02	%	Sim. to ISO 62
Mechanical properties	Value	Unit	Test Standard
Tensile modulus	7700	MPa	ISO 527-1, -2
Tensile stress at break, 5mm/min	120	MPa	ISO 527-1, -2
Tensile strain at break, 5mm/min	2	%	ISO 527-1, -2
Flexural modulus, 23°C	7500	MPa	ISO 178
Flexural strength, 23°C	200	MPa	ISO 178
Charpy impact strength, 23°C	32	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23°C	5	kJ/m <sup>2</sup>	ISO 179/1eA
Izod impact notched, 23°C	5.2	kJ/m <sup>2</sup>	ISO 180/1A
Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	220	°C	ISO 75-1, -2
DTUL at 8.0 MPa	115	°C	ISO 75-1, -2
Flammability at thickness h	V-0	class	UL 94
thickness tested (h)	0.75	mm	UL 94
Electrical properties	Value	Unit	Test Standard
Surface resistivity, 23°C	>1E15	Ohm	IEC 62631-3-2

### Diagrams

**True Stress-strain**



**Typical injection moulding processing conditions**

**Pre Drying**

	<b>Value</b>	<b>Unit</b>
Necessary low maximum residual moisture content	<b>0.02</b>	%
Drying time	<b>3 - 4</b>	h
Drying temperature	<b>100 - 140</b>	°C

**Temperature**

	<b>Value</b>	<b>Unit</b>
Hopper temperature	<b>20 - 30</b>	°C
Feeding zone temperature	<b>60 - 80</b>	°C
Zone1 temperature	<b>290 - 300</b>	°C
Zone2 temperature	<b>310 - 320</b>	°C
Zone3 temperature	<b>330 - 340</b>	°C
Zone4 temperature	<b>330 - 340</b>	°C
Nozzle temperature	<b>310 - 330</b>	°C
Melt temperature	<b>330 - 340</b>	°C
Mold temperature	<b>140 - 160</b>	°C
Hot runner temperature	<b>330 - 340</b>	°C

**Pressure**

	<b>Value</b>	<b>Unit</b>
Back pressure max.	<b>30</b>	bar

**Speed**

	<b>Value</b>
Injection speed	<b>fast</b>

**Screw Speed**

	<b>Value</b>	<b>Unit</b>
Screw speed diameter, 25mm	<b>120</b>	RPM
Screw speed diameter, 40mm	<b>75</b>	RPM
Screw speed diameter, 55mm	<b>50</b>	RPM

**Other text information**

**Pre-drying**

FORTRON should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be  $\leq -30^{\circ}\text{C}$ . The time between drying and processing should be as short as possible.

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## **FORTRON® 1115L0 - PPS**

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### **Longer pre-drying times/storage**

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For subsequent storage the material should be stored dry in the dryer until processed (<= 60 h).

### **Characteristics**

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#### **Product Categories**

Specialty

### **Contact**

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### **General Disclaimer**

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