Celanese
The chemistry inside innovation™

FORTRON® 9115L0 - PPS

Description

Fiberglass reinforced with high melt strength for blow molding & extrusion applications
Fortron® 9115L0 is a 15% fiberglass-reinforced grade of polyphenylene sulfide with high melt strength suitable for blow molding and extrusion applications.

Physical properties	Value	Unit	Test Standard
Density	**89.9**	lb/ft³	ISO 1183
Water absorption, 23 °C-sat	**0.02**	%	Sim. to ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	**1.12E6**	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	**17400**	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	**2**	%	ISO 527-1, -2
Flexural modulus, 23 °C	**1.09E6**	psi	ISO 178
Flexural strength, 23 °C	**29000**	psi	ISO 178
Charpy impact strength, 23 °C	**15.2**	ft-lb/in²	ISO 179/1eU
Charpy notched impact strength, 23 °C	**2.38**	ft-lb/in²	ISO 179/1eA
Izod impact notched, 23 °C	**2.47**	ft-lb/in²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	**428**	°F	ISO 75-1, -2
DTUL at 8.0 MPa	**239**	°F	ISO 75-1, -2
Flammability at thickness h	**V-0**	class	UL 94
thickness tested (h)	**0.0295**	in	UL 94

Electrical properties	Value	Unit	Test Standard
Surface resistivity, 23 °C	**>1E15**	Ohm	IEC 62631-3-2
Comparative tracking index	**PLC 3**	-	UL 746

Typical injection moulding processing conditions

Pre Drying	Value	Unit
Necessary low maximum residual moisture content	**0.02**	%
Drying time	**3 - 4**	h
Drying temperature	**212 - 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

Pressure	Value	Unit
Back pressure max.	**30**	bar

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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

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 =< - 30° C. The time between drying and processing should be as short as possible.

Longer pre-drying times/storage

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

Characteristics

Special Characteristics	Flame retardant
Product Categories	Specialty
Processing	Blow molding, Extrusion
Regulatory	Drinking water approved