

FORTRON® 1200L1 - PPS

Description

Fortron 1200L1 is an unfilled grade recommended primarily for extrusion applications. It has a high melt viscosity and tensile elongation. Recommended processing conditions are similar to those of our standard unfilled PPS grades.

Physical properties	Value	Unit	Test Standard
Density	1340	kg/m ³	ISO 1183
Molding shrinkage, parallel	1.3	%	ISO 294-4, 2577
Molding shrinkage, normal	1.6	%	ISO 294-4, 2577
Water absorption, 23°C-sat	0.02	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	4000	MPa	ISO 527-2/1A
Tensile strain at yield, 50mm/min	3	%	ISO 527-2/1A
Tensile stress at break, 50mm/min	88	MPa	ISO 527-2/1A
Tensile strain at break, 50mm/min	15	%	ISO 527-2/1A
Flexural modulus, 23°C	4100	MPa	ISO 178
Flexural strength, 23°C	141	MPa	ISO 178
Charpy impact strength, 23°C	200	kJ/m ²	ISO 179/1eU
Rockwell hardness (M-Scale)	93	M-Scale	ISO 2039-2

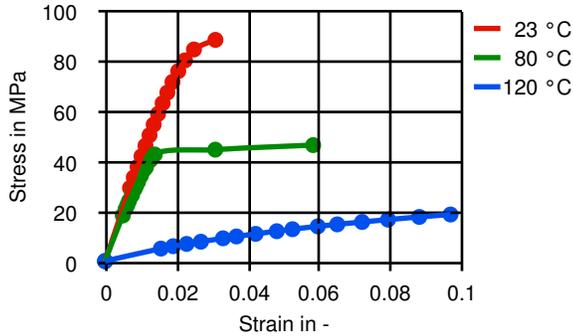
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	275	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	90	°C	ISO 11357-1,-2,-3
Coeff. of linear therm expansion, parallel	0.4	E-4/°C	ISO 11359-2
Coeff. of linear therm expansion, normal	0.42	E-4/°C	ISO 11359-2
Flammability at thickness h	V-0	class	UL 94
thickness tested (h)	3.00	mm	UL 94

Electrical properties	Value	Unit	Test Standard
Electric strength	30	kV/mm	IEC 60243-1

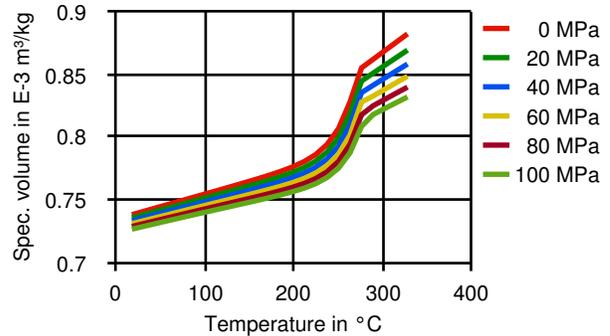
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Diagrams

True Stress-strain



Moldflow Specific volume-temperature (pvT)



Typical injection moulding processing conditions

	Value	Unit	Test Standard
Pre Drying			
Necessary low maximum residual moisture content	0.02	%	-
Drying time	3 - 4	h	-
Drying temperature	100 - 140	°C	-
Temperature	Value	Unit	Test Standard
Melt temperature	≤330	°C	-

Characteristics

Product Categories

Specialty

Delivery Form

Pellets

Processing

Film extrusion, Injection molding, Other extrusion, Sheet extrusion

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