

Product Texts

Fortron 1140L6 is an easier flow version of Fortron 1140L4 developed for drinking water applications. It offers essentially the same characteristics of 1140L4. Especially used for thin walled parts with long flow lengths. Applications made of this grade include components for pumps and electronics.

Flammability @1.6mm nom. V-0
 thickn. -
 Flammability at thickness h (0.38 V-0
 mm) -

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.6	%	ISO 294-4, 2577
^[C] Spec. heat capacity of melt	1500	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	14700	MPa	ISO 527
^[C] Stress at break	195	MPa	ISO 527
^[C] Strain at break	1.9	%	ISO 527
^[C] Charpy impact strength, +23°C	53	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	53	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	10	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	10	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	280	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	90	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	270	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 8.00 MPa	215	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	26	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	42	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
^[C] Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.4	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 1MHz	4.2	-	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	20	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1.3E14	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.02	%	Sim. to ISO 62
^[C] Density	1650	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Additives

Release agent

Delivery form

Pellets

Certifications

Drinking water contact

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.