

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.2	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.5	%	ISO 294-4, 2577
^[C] Density of melt	1150	kg/m ³	-
^[C] Spec. heat capacity of melt	1830	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3800	MPa	ISO 527
^[C] Stress at break	90	MPa	ISO 527
^[C] Strain at break	3	%	ISO 527

[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	110	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 8.00 MPa	95	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	52	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	53	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E9	Ohm*m	IEC 62631-3-1
^[C] Electric strength	18	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.02	%	Sim. to ISO 62
^[C] Density	1350	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Melt temperature	310 - 320	°C	-
Mold temperature	≥140	°C	-

Characteristics

Processing

Injection Molding, Film Extrusion, Sheet Extrusion, Other Extrusion

Regional Availability

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

Delivery form

Pellets, Powder

Other text information

Injection molding

In spite of the minimum moisture absorption a drying of FORTRON is necessary. Predrying in a dehumidified air dryer at 120 degC/3-4 hours is recommended.

On injection molding machines with 15-25 D long three-section screws, are usual in the trade, the unreinforced FORTRON is processable. A shut-off nozzle is recommended.

Melt temperature 310-320 degC

Mold wall temperature at least 140 degC

A medium injection rate is normally preferred. All mold cavities must be effectively vented.