

Product Texts

Injection Molding, 30% Glass Reinforced, Flame Retardant

ISO 1043 PBT-GF30 FR(17)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	37	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
^[C] Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.9	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	11500	MPa	ISO 527
^[C] Stress at break	125	MPa	ISO 527
^[C] Strain at break	2.1	%	ISO 527
^[C] Charpy impact strength, +23°C	50	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	50	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] Puncture - maximum force, +23°C	669	N	ISO 6603-2
^[C] Puncture - maximum force, -30°C	649	N	ISO 6603-2
^[C] Puncture energy, +23°C	2.3	J	ISO 6603-2
^[C] Puncture energy, -30°C	2.1	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	200	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	220	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	20	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	90	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
^[C] Burning Behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	1.5	mm	-
^[C] Oxygen index	32	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.9	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.8	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	60	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	520	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	35	kV/mm	IEC 60243-1
^[C] Comparative tracking index	275	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.35	%	Sim. to ISO 62
^[C] Humidity absorption	0.1	%	Sim. to ISO 62
^[C] Density	1650	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	250	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	240 - 260	°C	-
Mold temperature	80 - 100	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

Flame retardant, Heat stabilized or stable to heat

Regional Availability

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

Other text information

Injection molding

PREPROCESSING

Residual moisture content: 0.00 - 0.02 %

Drying temperature circulating air dryer: 120 °C

Drying time circulating air dryer: 4 - 8 h

PROCESSING

Melt temperature (Tmin - Tmax): 240 - 260 °C

Mold temperature: 80 - 100 °C