

Product Texts

Injection Molding, 45% Glass Reinforced, Hydrolysis resistant

ISO 1043 PBT-GF45

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	30	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
^[C] Molding shrinkage, parallel	0.4	%	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	14000	MPa	ISO 527
^[C] Stress at break	135	MPa	ISO 527
^[C] Strain at break	2.4	%	ISO 527
^[C] Charpy impact strength, +23°C	60	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	60	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	225	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	205	°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	110	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Comparative tracking index	425	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1610	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	260	°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	250 - 270	°C	-
Mold temperature	80 - 100	°C	-

Characteristics

Processing

Injection Molding

Chemical Resistance

Hydrolytically Stable

Delivery form

Pellets

Regional Availability

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

Special Characteristics

Heat stabilized or stable to heat

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): 250 - 270 °C

Mold temperature: 80 - 100 °C