

Product Texts

Injection Molding, 60% Glass Reinforced, Heat Stabilized, Improved flow

ISO 1043 PA6-GF60

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.5 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	20000 / 12000	MPa	ISO 527
^[C] Stress at break	225 / 145	MPa	ISO 527
^[C] Strain at break	2.4 / 3.5	%	ISO 527
^[C] Charpy impact strength, +23°C	90 / 90	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	90 / 90	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	16 / 23	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	16 / 15	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	1250 / 1350	N	ISO 6603-2
^[C] Puncture - maximum force, -30°C	1100 / 1150	N	ISO 6603-2
^[C] Puncture energy, +23°C	3.1 / 4.7	J	ISO 6603-2
^[C] Puncture energy, -30°C	2.2 / 2.2	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	222 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	213 / *	°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	12 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	75 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	5.3 / 11.2	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.7 / 5.1	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	164 / 2150	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	177 / 651	E-4	IEC 62631-2-1
^[C] Volume resistivity	5.8E12 / 8E9	Ohm*m	IEC 62631-3-1
^[C] Electric strength	33 / 33	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	3.6 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.3 / *	%	Sim. to ISO 62
^[C] Density	1700 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.15	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Pellets

Regional Availability

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

Other text information**Injection molding**

PREPROCESSING

Residual moisture content: 0.05 - 0.15%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 270 - 290 °C

Mold temperature: 80 - 120 °C