

Product Texts

Injection Molding, 50% Glass Reinforced, Heat Stabilized

ISO 1043 PA6-GF50

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	16300 / 9800	MPa	ISO 527
^[C] Stress at break	220 / 140	MPa	ISO 527
^[C] Strain at break	3 / 6	%	ISO 527
^[C] Charpy impact strength, +23°C	100 / 105	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	100 / 90	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	20 / 25	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	17 / 15	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	210 / *	°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	15 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	80 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.5 / *	%	Sim. to ISO 62
^[C] Density	1570 / -	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	≤0.12	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Characteristics**Processing**

Injection Molding

Features

Fatigue Resistance

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: 0.03 - 0.12%

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