

Product Texts

Injection Molding, 50% Glass Reinforced, Heat Stabilized, Improved flow

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	16200 / 9500	MPa	ISO 527
^[C] Stress at break	205 / 128	MPa	ISO 527
^[C] Strain at break	2.3 / 4.3	%	ISO 527
^[C] Charpy impact strength, +23°C	85 / 80	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	80 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	13 / -	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	1220 / 1260	N	ISO 6603-2
^[C] Puncture energy, +23°C	3.6 / 5.8	J	ISO 6603-2

[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	207 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	215 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	10 / *	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] 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

Special Characteristics

U.V. stabilized or stable to weather, 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: 0.03 - 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