

Product Texts

Injection Molding, 30% Glass Reinforced, Heat Stabilized

ISO 1043 PA6-GF30

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	10000 / 5800	MPa	ISO 527
^[C] Stress at break	170 / 100	MPa	ISO 527
^[C] Strain at break	3.5 / 9	%	ISO 527
Flexural modulus, 23°C	9500 / 5600	MPa	ISO 178
Flexural strength	270 / 165	MPa	ISO 178
^[C] Charpy impact strength, +23°C	80 / 100	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	65 / 65	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	10 / 20	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	- / 10	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	70 / 85	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	15 / 20	kJ/m ²	ISO 180/1A
Izod notched impact strength	10 / 10	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-

[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	205 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	220 / *	°C	ISO 75-1/-2
Vicat softening temperature, B	212 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	100 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	7 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2.1 / *	%	Sim. to ISO 62
^[C] Density	1360 / -	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, Thermal Stability

Delivery form

Pellets

Applications

Automotive

Special Characteristics

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: 0.03 - 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