

Product Texts

Injection Molding, 30% Glass Reinforced

ISO 1043 PA6-GF30

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	9800 / 6100	MPa	ISO 527
^[C] Stress at break	170 / 105	MPa	ISO 527
^[C] Strain at break	3 / 6	%	ISO 527
^[C] Tensile creep modulus, 1h	* / 5100	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	* / 4100	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	80 / 95	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	70 / 70	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	12 / 20	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	10 / 10	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	1070 / -	N	ISO 6603-2
^[C] Puncture - maximum force, -30°C	950 / -	N	ISO 6603-2
^[C] Puncture energy, +23°C	8 / 14	J	ISO 6603-2
^[C] Puncture energy, -30°C	6 / 5	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	200 / *	°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	20 / *	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	7 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2.1 / *	%	Sim. to ISO 62
^[C] Density	1360 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	140 / *	cm ³ /g	ISO 307, 1157, 1628

[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

Characteristics**Processing**

Injection Molding

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