

Product Texts

Injection Molding, 30% Glass Reinforced

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	0.6 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	9900 / 6600	MPa	ISO 527
^[C] Stress at break	180 / 106	MPa	ISO 527
^[C] Strain at break	2.7 / 6.1	%	ISO 527
Flexural modulus, 23°C	8700 / 6300	MPa	ISO 178
^[C] Charpy impact strength, +23°C	60 / 65	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	50 / 40	kJ/m ²	ISO 179/1eU
Izod impact strength, +23°C	50 / 60	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	10 / 10	kJ/m ²	ISO 180/1A
^[C] Puncture - maximum force, +23°C	840 / -	N	ISO 6603-2
^[C] Puncture - maximum force, -30°C	740 / -	N	ISO 6603-2
^[C] Puncture energy, +23°C	3 / -	J	ISO 6603-2
^[C] Puncture energy, -30°C	2 / -	J	ISO 6603-2
Ball indentation hardness	209 / -	MPa	ISO 2039-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	219 / *	°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	30 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	80 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Comparative tracking index	500 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	6.4 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2 / *	%	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

Special Characteristics

U.V. stabilized or stable to weather

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