

**Product Texts**

Injection Molding, 30% Glass Reinforced, Flame Retardant (halogen free)

ISO 1043 PA6-GF30 FR(40)

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	11500 / 7800	MPa	ISO 527
<sup>[C]</sup> Stress at break	140 / 90	MPa	ISO 527
<sup>[C]</sup> Strain at break	2.8 / 5.4	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	60 / 65	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	60 / 55	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	- / 13	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	- / 10	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	205 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	215 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	70 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
<sup>[C]</sup> Burning Behav. 5V at thickness h	5VA / *	class	IEC 60695-11-20
Thickness tested	1.5 / *	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	3.1 / 5	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	4 / 4	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	150 / 710	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	190 / 570	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	>1E13 / 1.3E10	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Electric strength	32 / 31	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	5.2 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	1.6 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1460 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Special Characteristics**

Flame retardant, Halogen-free

**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 - 0.07%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 4 h

**PROCESSING**

Melt temperature (Tmin - Tmax): 250 - 270 °C

Mold temperature: 70 - 90 °C