

**Product Texts**

Injection Molding, 40% Glass Reinforced, Heat Stabilized

ISO 1043 PA6-GF40

<b>Mechanical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>12500 / 8000</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>200 / 125</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>3.5 / 7.5</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>100 / 100</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>90 / 85</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>15 / 25</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>10 / 10</b>	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

<b>Thermal properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>220 / *</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>210 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	<b>220 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>16 / *</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	<b>90 / *</b>	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

<b>Other properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<sup>[C]</sup> Water absorption	<b>6 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>1.8 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1460 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

<b>Test specimen production</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	<b>280</b>	°C	ISO 294
Injection Molding, mold temperature	<b>80</b>	°C	ISO 294

[C]: CAMPUS

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>80</b>	°C	-
Pre-drying - Time	<b>2 - 6</b>	h	-
Processing humidity	<b>≤0.12</b>	%	-
Melt temperature	<b>270 - 290</b>	°C	-
Mold temperature	<b>80 - 120</b>	°C	-

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

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