

**Product Texts**

Injection Molding, Unreinforced, Heat Stabilized

ISO 1043 PA6

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.9 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	3700 / 1100	MPa	ISO 527
<sup>[C]</sup> Yield stress	90 / 55	MPa	ISO 527
<sup>[C]</sup> Yield strain	4 / 20	%	ISO 527
<sup>[C]</sup> Nominal strain at break	10 / >50	%	ISO 527
Flexural modulus, 23°C	3000 / 900	MPa	ISO 178
Flexural strength	120 / 40	MPa	ISO 178
<sup>[C]</sup> Charpy impact strength, +23°C	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	- / 25	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
Izod impact strength, +23°C	115 / N	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C	10 / 10	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength	10 / 10	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	-
<sup>[C]</sup> Puncture - maximum force, +23°C	4600 / -	N	ISO 6603-2
<sup>[C]</sup> Puncture - maximum force, -30°C	6800 / -	N	ISO 6603-2
<sup>[C]</sup> Puncture energy, +23°C	46 / -	J	ISO 6603-2
<sup>[C]</sup> Puncture energy, -30°C	70 / -	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	222 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	60 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	170 / *	°C	ISO 75-1/-2
Vicat softening temperature, B	200 / *	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	70 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	90 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	10 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	3 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1140 / -	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	270	°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	260 - 280	°C	-
Mold temperature	80 - 100	°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): 260 - 280 °C

Mold temperature: 80 - 100 °C