

**Product Texts**

Low fuel permeation PA6 suitable for use in injection molding/welding of small engine fuel tanks

ISO 1043 PA6-I

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	13 / *	cm <sup>3</sup> /10min	ISO 1133
Temperature	250 / *	°C	-
Load	2.16 / *	kg	-
<sup>[C]</sup> Molding shrinkage, parallel	2.1 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.9 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	869	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.22	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	2740	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	9.37E-8	m <sup>2</sup> /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	1750 / 560	MPa	ISO 527
<sup>[C]</sup> Yield stress	43 / -	MPa	ISO 527
<sup>[C]</sup> Yield strain	4.2 / -	%	ISO 527
<sup>[C]</sup> Nominal strain at break	>50 / -	%	ISO 527
<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	90 / N	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	20 / 20	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Puncture - maximum force, +23°C	3300 / -	N	ISO 6603-2
<sup>[C]</sup> Puncture energy, +23°C	48 / -	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	55 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	100 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	130 / *	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	110 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	120 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	7 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	2.5 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1060 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics****Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Additives**

Release agent

**Special Characteristics**

High impact or impact modified, U.V. stabilized or stable to weather

**Features**

Weldable

**Regional Availability**

North America, Europe, Asia Pacific

**Other text information**

**Injection molding**

[Injection Molding Recommendations](#)

[Steel recommendations for molds screws and barrels](#)

[Trouble shooting guideline for injection molding](#)