

**Product Texts**

Fortron 6160B4 has excellent heat and chemical resistance as well as good electrical properties. This product is inherently flame-retardant and offers high hardness and rigidity. 6160B4 has demonstrated excellent performance in hot runner systems and superior contact corrosion resistance. Applications include electronic components (i.e. molded in lead frames, contacts or pins).

Flammability @1.6mm nom. thickn. V-0 -  
 Flammability at thickness h (0.81 mm) V-0 -

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	<b>0.2</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>0.6</b>	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>17300</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>145</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>1</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>27</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>27</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>7</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>7</b>	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>280</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	<b>90</b>	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>270</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 8.00 MPa	<b>220</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn. Thickness tested	<b>V-0</b> <b>1.5</b>	class mm	IEC 60695-11-10 -
<sup>[C]</sup> Burning Behav. at thickness h Thickness tested	<b>V-0</b> <b>0.8</b>	class mm	IEC 60695-11-10 -

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 1MHz	<b>4.9</b>	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	<b>10</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	<b>&gt;1E13</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	<b>&gt;1E15</b>	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	<b>26</b>	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	<b>0.02</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1900</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	<b>130 - 140</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-

**FORTRON® 6160B4**

PPS-(MD+GF)60

Celanese

Melt temperature	<b>320 - 340</b>	°C	-
Mold temperature	<b>≥140</b>	°C	-

**Characteristics****Processing**

Injection Molding

**Chemical Resistance**

General Chemical Resistance

**Delivery form**

Pellets

**Applications**

Electrical and Electronical

**Special Characteristics**

Flame retardant, Heat stabilized or stable to heat

**Regional Availability**

North America, Europe, South and Central America, Near East/Africa

**Other text information****Injection molding**

Predrying in a dehumidified air dryer at 130 - 140 degC/3-4 hours is recommended.

On injection molding machines with 15-25 D long three-section screws, as are usual in the trade, the FORTRON is processable. A shut-off nozzle is preferred to a free-flow nozzle.

Melt temperature 320-340 degC

Mold wall temperature at least 140 degC

A medium injection rate is normally preferred. All mold cavities must be effectively vented.

Tool temperature of at least 135 degC is recommended for parts to achieve maximum crystallizable potential.