

**Product Texts**

PPA flame retardant injection moulding grade, 30% glass fibre reinforced. Halogen and red phosphorus free. High melting point. Natural colour.

Suitable for parts requiring fire retardancy along with high stiffness and good mechanical resistance. Suitable for Lead Free Soldering application. Rated V0 according to UL94.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	<b>0.4 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>0.9 / *</b>	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>10900 / 11000</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>160 / 135</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>2.4 / 2.2</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>55 / -</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>50 / -</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>10 / 11</b>	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	<b>305 / *</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>280 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	<b>V-0 / *</b>	class	IEC 60695-11-10
Thickness tested	<b>0.4 / *</b>	mm	-
Yellow Card available	<b>yes / *</b>	-	-
<sup>[C]</sup> Burning Behav. at thickness h	<b>V-0 / *</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5 / *</b>	mm	-
Yellow Card available	<b>yes / *</b>	-	-
<sup>[C]</sup> Burning Behav. 5V at thickness h	<b>5VA / *</b>	class	IEC 60695-11-20
Thickness tested	<b>1.5 / *</b>	mm	-
Yellow Card available	<b>yes / *</b>	-	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	<b>1E13 / -</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Electric strength	<b>42 / 44</b>	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	<b>600 / -</b>	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Humidity absorption	<b>1.3 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1460 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	<b>120</b>	°C	-
Pre-drying - Time	<b>≥4</b>	h	-
Processing humidity	<b>≤0.1</b>	%	-
Melt temperature	<b>310 - 320</b>	°C	-
Mold temperature	<b>100 - 110</b>	°C	-

**Characteristics****Processing**

Injection Molding

**Delivery form**

Granules, Natural Color

**Additives**

Release agent

**Special Characteristics**

Flame retardant, Halogen-free, Phosphorus-free, Heat stabilized or stable to heat

**Regional Availability**

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

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

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.10%. Typical conditions with a desiccant drier: temperature 120° C, dew point -20 ° C or below, time 4 h or more. Avoid excessive shear rates and high thermal stresses for better processing. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

## Injection Molding Processing Parameters

Melt Temperature

310 - 320°C

Mold Temperature

110 - 130°C

Injection Speed

medium