

**Product Texts**

PA610 15% carbon fibre reinforced injection moulding grade. Heat stabilized. Black colour.

Suitable for parts and components requiring high mechanical properties. The presence of carbon fibres also provides higher electrical and thermal conductivity. This grade is partially renewably-sourced (64% of base polymer by weight).

<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>11600 / -</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>180 / -</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>3.5 / -</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>50 / -</b>	kJ/m <sup>2</sup>	ISO 179/1eU

[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> Burning Behav. at thickness h	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8 / *</b>	mm	-

[C]: CAMPUS

<b>Electrical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	<b>1000 / 100</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	<b>* / 10000</b>	Ohm	IEC 62631-3-2

[C]: CAMPUS

<b>Other properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<sup>[C]</sup> Water absorption	<b>2.7 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>1.2 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1150 / -</b>	kg/m <sup>3</sup>	ISO 1183
Biobased content	<b>51</b>	%	-

[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 - 4</b>	h	-
Processing humidity	<b>≤0.1</b>	%	-
Melt temperature	<b>240 - 280</b>	°C	-
Mold temperature	<b>80 - 90</b>	°C	-

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Granules, Black

**Additives**

Release agent

**Special Characteristics**

Increased electrical conductivity, Anti-static, Heat stabilized or stable to heat, Thermally Conductive

**Certifications**

Contains renewable resources

**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 80 °C, dew point -20 °C or below, time 2-4 h or more. 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

240 - 280°C

Mold Temperature

80 - 90°C

Injection Speed

high