

**Product Texts**

PA66 40% carbon fibre reinforced injection moulding grade. Heat stabilized. Black colour.

Suitable for parts and components requiring very high mechanical properties: stiffness, dimensional stability, fatigue and creep resistance. The presence of carbon fibres also provides higher electrical and thermal conductivity.

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	30000 / -	MPa	ISO 527
<sup>[C]</sup> Stress at break	250 / -	MPa	ISO 527
<sup>[C]</sup> Strain at break	1.5 / -	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	60 / -	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	65 / -	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	11 / -	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	9 / -	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	260 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	250 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	240 / *	°C	ISO 306
<sup>[C]</sup> Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-

[C]: CAMPUS

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

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	5.7 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	1.6 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1320 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Granules, Black

**Additives**

Release agent

**Special Characteristics**

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

**Features**

Creep Resistance, Fatigue Resistance

**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. 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

280 - 300°C

Mold Temperature

80 - 100°C

Injection Speed

medium