

**Product Texts**

PA66 50% glass fibre reinforced injection moulding grade. Heat stabilized. Deep black colour.

Suitable for technical parts requiring very high stiffness and high mechanical resistance. Excellent heat ageing properties retention, improved welding lines strength. Especially fit for demanding metal replacement applications.

Processing/Physical Characteristics	dry / cond	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>0.7 / *</b>	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>17000 / 14250</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>240 / 190</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>3 / 3.1</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>100 / 112</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>102 / -</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>20 / 25</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>17 / -</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>260 / *</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>250 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 8.00 MPa	<b>215 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	<b>255 / *</b>	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>15 / *</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	<b>85 / *</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8 / *</b>	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	<b>1E13 / 1E11</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	<b>* / 1E10</b>	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	<b>550 / -</b>	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	<b>4 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>1.1 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1580 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	<b>80</b>	°C	-
Pre-drying - Time	<b>2 - 4</b>	h	-
Processing humidity	<b>≤0.15</b>	%	-
Melt temperature	<b>280 - 310</b>	°C	-
Mold temperature	<b>80 - 100</b>	°C	-

**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Heat stabilized or stable to heat

**Delivery form**

Granules, Black

**Regional Availability**

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

**Additives**

Release agent

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

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.15%. 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  
280 - 310°CMold Temperature  
80 - 100°CInjection Speed  
high