

**Product Texts**

Injection Molding, 15% Glass Reinforced, Heat Stabilized

ISO 1043 PA66-GF15

<b>Processing/Physical Characteristics</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.7 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

[C]: CAMPUS

<b>Mechanical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	6200 / 3800	MPa	ISO 527
<sup>[C]</sup> Stress at break	120 / 75	MPa	ISO 527
<sup>[C]</sup> Strain at break	3 / 18	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	35 / 60	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	35 / 40	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	- / 10	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	- / 10	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Puncture - maximum force, +23°C	610 / 816	N	ISO 6603-2
<sup>[C]</sup> Puncture - maximum force, -30°C	590 / -	N	ISO 6603-2
<sup>[C]</sup> Puncture energy, +23°C	1.7 / 2.1	J	ISO 6603-2
<sup>[C]</sup> Puncture energy, -30°C	0.7 / -	J	ISO 6603-2

[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	263 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	230 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	250 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	40 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
<sup>[C]</sup> Oxygen index	24 / *	%	ISO 4589-1/-2

[C]: CAMPUS

<b>Electrical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	4 / 9	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	4 / 4	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	90 / 2200	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	170 / 700	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	35 / 35	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	425 / -	-	IEC 60112

[C]: CAMPUS

<b>Other properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<sup>[C]</sup> Water absorption	7 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	2.4 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1240 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Viscosity number	146 / *	cm³/g	ISO 307, 1157, 1628
[C]: CAMPUS			

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	290	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
[C]: CAMPUS			

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	280 - 300	°C	-
Mold temperature	80 - 120	°C	-

**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Heat stabilized or stable to heat

**Delivery form**

Pellets

**Regional Availability**

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

**Additives**

Release agent

**Other text information**

**Injection molding**

**PREPROCESSING**

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

**PROCESSING**

Melt temperature (Tmin - Tmax): 280 - 300 °C

Mold temperature: 80 - 120 °C