

**Product Texts**

10% Glass Reinforced, Flame Retardant

ISO 1043 PC-GF10 FR

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Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	6	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<sup>[C]</sup> Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.6	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	1090	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.26	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	1620	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	1.48E-7	m <sup>2</sup> /s	-
<sup>[C]</sup> Ejection temperature	134	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	3500	MPa	ISO 527
<sup>[C]</sup> Yield stress	65	MPa	ISO 527
<sup>[C]</sup> Yield strain	5	%	ISO 527
<sup>[C]</sup> Nominal strain at break	15	%	ISO 527

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	145	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	150	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	45	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
<sup>[C]</sup> Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3.0	mm	-
Yellow Card available	yes	-	-
<sup>[C]</sup> Burning Behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	3.0	mm	-
Yellow Card available	yes	-	-
<sup>[C]</sup> Oxygen index	35	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	3.1	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	3	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	9	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	90	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	>1E15	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	29	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	200	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	<b>0.31</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1270</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	<b>300</b>	°C	ISO 294
Injection Molding, mold temperature	<b>100</b>	°C	ISO 294

[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>≤0.03</b>	%	-
Melt temperature	<b>290 - 320</b>	°C	-
Mold temperature	<b>80 - 120</b>	°C	-
Zone 1	<b>260 - 280</b>	°C	-
Zone 2	<b>270 - 290</b>	°C	-
Zone 3	<b>280 - 300</b>	°C	-
Nozzle temperature	<b>270 - 290</b>	°C	-

**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Flame retardant, Heat stabilized or stable to heat

**Delivery form**

Pellets

**Regional Availability**

North America, Europe

**Additives**

Release agent

**Other text information**

**Injection molding**

[Injection Molding Recommendations](#)