

Product Texts

45% Glass Reinforced

ISO 1043 PA6-GF45

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
^[C] Density of melt	1330	kg/m ³	-
^[C] Thermal conductivity of melt	0.33	W/(m K)	-
^[C] Spec. heat capacity of melt	1920	J/(kg K)	-
^[C] Eff. thermal diffusivity	1.27E-7	m ² /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	14500 / 9100	MPa	ISO 527
^[C] Stress at break	223 / 145	MPa	ISO 527
^[C] Strain at break	4 / 6	%	ISO 527
^[C] Charpy impact strength, +23°C	100 / 115	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	95 / 95	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	20 / 35	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	13 / 13	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	210 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	220 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	50 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3.0 / *	mm	-
Yellow Card available	yes / *	-	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.5 / 14	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	5.2 / 4.5	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	50 / 3000	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	150 / 1200	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E13 / 1E11	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
^[C] Electric strength	25 / 20	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / 600	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.5 / *	%	Sim. to ISO 62
^[C] Density	1510 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Delivery form

Pellets

Other text information**Injection molding**[Injection Molding Recommendations](#)[Steel recommendations for molds screws and barrels](#)[Trouble shooting guideline for injection molding](#)