

Product Texts

50% Glass Reinforced, Heat Stabilized

ISO 1043 PA6-GF50

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.2 / *	%	ISO 294-4, 2577
^[C] Density of melt	1380	kg/m ³	-
^[C] Thermal conductivity of melt	0.37	W/(m K)	-
^[C] Spec. heat capacity of melt	1900	J/(kg K)	-
^[C] Eff. thermal diffusivity	1.41E-7	m ² /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	16000 / 12000	MPa	ISO 527
^[C] Stress at break	230 / 160	MPa	ISO 527
^[C] Strain at break	3 / 3.5	%	ISO 527
^[C] Charpy impact strength, +23°C	100 / 105	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	85 / 85	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	22 / 25	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	15 / 15	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	10 / *	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]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	5.5 / 12	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.5 / 4.9	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	360 / 3250	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	270 / 770	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	35 / 25	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	4.5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.4 / *	%	Sim. to ISO 62
^[C] Density	1560 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific

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