

Product Texts

20% Glass Reinforced, Heat Stabilized, Flame Retardant (halogen- phosphorous-free)

ISO 1043 PA6-GF20 FR(30)

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577
^[C] Density of melt	1030	kg/m ³	-
^[C] Thermal conductivity of melt	0.29	W/(m K)	-
^[C] Spec. heat capacity of melt	2270	J/(kg K)	-
^[C] Eff. thermal diffusivity	1.25E-7	m ² /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	6000 / 2500	MPa	ISO 527
^[C] Stress at break	85 / 45	MPa	ISO 527
^[C] Strain at break	3.6 / 15	%	ISO 527
^[C] Charpy impact strength, +23°C	45 / 110	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	35 / 35	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	3.5 / 7	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	3 / 3	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	140 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	210 / *	°C	ISO 75-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	V-2 / *	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	4.3 / 10	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.8 / 3.9	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	130 / 3000	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	210 / 1000	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	30 / 25	kV/mm	IEC 60243-1
^[C] Comparative tracking index	575 / *	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	6.5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2 / *	%	Sim. to ISO 62
^[C] Density	1340 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

Flame retardant, Halogen-free, Phosphorus-free, Heat stabilized or stable to heat

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](#)