

Product Texts

Injection Molding, 45% Glass Reinforced, Flame Retardant (halogen free), Heat Stabilized, Improved flow, Recycled Content

ISO 1043 PA6-GX45 FR(40)

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	15800 / 10300	MPa	ISO 527
^[C] Stress at break	160 / 115	MPa	ISO 527
^[C] Strain at break	2.2 / 4.4	%	ISO 527
^[C] Charpy impact strength, +23°C	55 / 60	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	50 / 50	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	- / 13	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	- / 10	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	910 / 990	N	ISO 6603-2
^[C] Puncture energy, +23°C	3.9 / 5	J	ISO 6603-2

[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	70 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
^[C] Burning Behav. 5V at thickness h	5VA / *	class	IEC 60695-11-20
Thickness tested	1.0 / *	mm	-
^[C] Oxygen index	34 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.3 / 8.2	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.9 / 4.2	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	145 / 970	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	150 / 630	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13 / 4.8E10	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1.8E14	Ohm	IEC 62631-3-2
^[C] Electric strength	40 / 36	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	3.5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.1 / *	%	Sim. to ISO 62
^[C] Density	1570 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	260	°C	ISO 294

Injection Molding, mold temperature

80

°C

ISO 294

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Delivery form

Pellets

Special Characteristics

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

Certifications

Recycled Resin Content

Regional Availability

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

Other text information**Injection molding**

PREPROCESSING

Residual moisture content: 0.03 - 0.07%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 250 - 280 °C

Mold temperature: 70 - 90 °C