

Product Texts

40% Glass Reinforced, PA4T, Electro-friendly

ISO 1043 PPA-GF40

ForTii® K12 combines high mechanical strength and good flowability, ideal for designs requiring dimensional stability and impact resistance. K12 is suitable for applications such as sensor housing or camera bracket.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	13500 / -	MPa	ISO 527
^[C] Stress at break	210 / -	MPa	ISO 527
^[C] Strain at break	2 / -	%	ISO 527
^[C] Charpy impact strength, +23°C	65 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	11 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	325 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	125 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	305 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	320 / *	°C	ISO 75-1/-2
^[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	5 / 5	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.5 / 4.5	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	120 / 120	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	250 / 250	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13 / >1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / >1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	33 / 33	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	4.4 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.7 / *	%	Sim. to ISO 62
^[C] Density	1530 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

ForTii® K12

PPA-GF40

Envalior

Processing

Injection Molding

Additives

Lubricants, Release agent

Delivery form

Granules

Regional Availability

North America, Europe, Asia Pacific

Other text information**Injection molding**[Injection Molding Recommendations](#)[Hot runner recommendations for molding high heat performance Engineering Materials](#)[Steel recommendations for molds screws and barrels](#)[Trouble shooting guideline for injection molding](#)