Property Data

Envalior
Imagine the Future

ForTii® K12

PPA—GF40

40% Glass Reinforced, PA4T, Electro—friendly

Print Date: 2024—12—10

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.

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.35 / *	%	ISO 294—4
Molding shrinkage (normal)	1 / *	%	ISO 294—4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	13500 / —	MPa	ISO 527—1/—2
Stress at break	210 / —	MPa	ISO 527—1/—2
Strain at break	2 / —	%	ISO 527—1/—2
Flexural modulus	13500 / —	MPa	ISO 178
Flexural strength	330 / —	MPa	ISO 178
Charpy impact strength (+23°C)	65 / —	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	11 / —	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	325 / *	°C	ISO 11357—1/—3
Temp. of deflection under load (1.80 MPa)	305 / *	°C	ISO 75—1/—2
Coeff. of linear therm. expansion (parallel)	0.3	E—4/°C	ASTM D696
Coeff. of linear therm. expansion (normal)	0.4	E—4/°C	ASTM D696
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695—11—10
Thickness tested	HB / *	mm	IEC 60695—11—10
UL recognition	3 / *	—	—

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
ELECTRICAL PROPERTIES	*DRY / COND*		
Volume resistivity	>1E13 / >1E13	Ohm*m	IEC 62631−3−1
Electric strength	33 / 33	kV/mm	IEC 60243−1
Comparative tracking index	600 / −	V	IEC 60112
Relative permittivity (100Hz)	5 / 5	−	IEC 62631−2−1
Relative permittivity (1 MHz)	4.5 / 4.5	−	IEC 62631−2−1
OTHER PROPERTIES	*DRY / COND*		
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1530 / −	kg/m³	ISO 1183