

ForTii® XS51

PPA-GF FR(40)

50% Glass Reinforced, PA4T, Flame Retardant, Halogen free and free of red phosphorous

ForTii® XS51 offers an excellent balance of mechanical strength and flow. Its stable process behavior can allow high quality surface requirements such as Notebook covers. XS51 can support complicated geometry design and enabling robust mechanical performance in drop test.

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage (parallel)	0.38 / *	%	ISO 294-4
Molding shrinkage (normal)	0.59 / *	%	ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	18500 / 19000	MPa	ISO 527-1/-2
Stress at break	230 / 210	MPa	ISO 527-1/-2
Strain at break	2.3 / 2	%	ISO 527-1/-2
Flexural modulus	17000 / 18000	MPa	ISO 178
Flexural strength	350 / 310	MPa	ISO 178
Charpy impact strength (+23°C)	90 / 75	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13.5 / 12	kJ/m ²	ISO 179/1eA
Thermal properties			
	dry / cond		
Melting temperature (10°C/min)	315 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	250 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.15 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.45 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-



ForTii[®] XS51

Properties	Typical Data	Unit	Test Method
Electrical properties	dry / cond		
Electric strength	30 / -	kV/mm	IEC 60243-1
Other properties	dry / cond		
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1670 / -	kg/m ³	ISO 1183

