

ForTii® H11

PPA-GF30 FR(40)

30% Glass Reinforced, PA4T, High Flow, Halogen free and free of red phosphorous

Print Date: 2019-10-11

Properties	Typical Data	Unit	Test Method
Rheological properties dry / cond			
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	1.1 / *	%	ISO 294-4
Mechanical properties dry / cond			
Tensile modulus	11000 / 11000	MPa	ISO 527-1/-2
Stress at break	140 / 135	MPa	ISO 527-1/-2
Strain at break	1.9 / 1.8	%	ISO 527-1/-2
Flexural modulus	10500 / 10500	MPa	ISO 178
Flexural strength	210 / 200	MPa	ISO 178
Charpy impact strength (+23°C)	40 / 40	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	8 / 8	kJ/m ²	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)	295 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.21 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.65 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (parallel)	0.3	E-4/°C	ASTM D696
Coeff. of linear therm. expansion (normal)	0.5	E-4/°C	ASTM D696
Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10

Property Data

ForTii[®] H11

Print Date: 2019-10-11

Properties	Typical Data	Unit	Test Method
Thickness tested	0.4 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Relative Temperature Index - electrical	140	°C	UL746B
RTI electrical (Thickness (1) tested)	0.35	mm	UL746B

Electrical properties

dry / cond

Volume resistivity	>1E13 / 1E13	Ohm*m	IEC 60093
Comparative tracking index	600 / -	V	IEC 60112
Relative permittivity (100Hz)	4.4 / 5.3	-	IEC 60250
Relative permittivity (1 MHz)	4.1 / 4.3	-	IEC 60250
Relative permittivity (1GHz)	3.9 / -	-	IEC 60250

Other properties

dry / cond

Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1460 / -	kg/m ³	ISO 1183