

ForTii® C11–F

PPA–GF30 FR(40)

30% Glass Reinforced, PA4T, Electro–friendly, Halogen free and free of red phosphorous

ForTii® C11–F is developed for low corrosion and has good balance in flow, toughness and stiffness, enabling thin walls or complicated geometries for E&E applications. C11–F has an all color V0 rating down 0.2mm and high RTI electrical rating of 140°C at 0.75 mm and a CTI of 800V to secure thermal ageing and electrical performance.

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.35 / *	%	ISO 294–4
Molding shrinkage (normal)	1.2 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	12300 / 12600	MPa	ISO 527–1/–2
Stress at break	140 / 135	MPa	ISO 527–1/–2
Strain at break	1.8 / 2	%	ISO 527–1/–2
Flexural modulus	11300 / 11300	MPa	ISO 178
Flexural strength	245 / 230	MPa	ISO 178
Charpy impact strength (+23°C)	46 / 41	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	7 / 6	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	333 / *	°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)	0.2 / *	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)	0.35	E–4/°C	ASTM D696
Burning Behav. at 1.5 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10

Property Data

ForTii® C11–F

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
UL recognition	Yes / *	–	–
Burning Behav. at 3.0 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
UL recognition	Yes / *	–	–
Relative Temperature Index – electrical	140	°C	UL746B
RTI electrical (Thickness (1) tested)	0.75	mm	UL746B

ELECTRICAL PROPERTIES	DRY / COND		
Electric strength	36 / 36	kV/mm	IEC 60243–1
Comparative tracking index	600 / 600	V	IEC 60112
Comparative Tracking Index (above 600V)	800	V	Sim. to IEC 60112
Relative permittivity (1GHz)	3.85 / 3.92	–	IEC 61189–2–721

OTHER PROPERTIES	DRY / COND		
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1470 / –	kg/m³	ISO 1183