

ForTii[®] Care P1G6

PPA—GF30

30% Glass Reinforced, High Performance PPA, Medical grade

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	1.2 / *	%	ISO 294-4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	11300 / 11500	MPa	ISO 527-1/-2
Tensile modulus (-40°C)	11500 / -	MPa	ISO 527-1/-2
Tensile modulus (40°C)	10800 / -	MPa	ISO 527-1/-2
Tensile modulus (80°C)	10500 / 6200	MPa	ISO 527-1/-2
Tensile modulus (100°C)	10000 / -	MPa	ISO 527-1/-2
Tensile modulus (120°C)	8000 / 4600	MPa	ISO 527-1/-2
Tensile modulus (150°C)	5000	MPa	ISO 527-1/-2
Tensile modulus (160°C)	4500	MPa	ISO 527-1/-2
Tensile modulus (180°C)	4300	MPa	ISO 527-1/-2
Tensile modulus (200°C)	4000	MPa	ISO 527-1/-2
Stress at break	200 / 180	MPa	ISO 527-1/-2
Stress at break (-40°C)	230 / -	MPa	ISO 527-1/-2
Stress at break (40°C)	200 / -	MPa	ISO 527-1/-2
Stress at break (80°C)	180 / 95	MPa	ISO 527-1/-2
Stress at break (100°C)	160 / -	MPa	ISO 527-1/-2
Stress at break (120°C)	130 / 70	MPa	ISO 527-1/-2
Stress at break (150°C)	95	MPa	ISO 527-1/-2
Stress at break (160°C)	90	MPa	ISO 527-1/-2
Stress at break (180°C)	80	MPa	ISO 527-1/-2

ForTii[®] Care P1G6

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Stress at break (200°C)	70	MPa	ISO 527-1/-2
Strain at break	2.2 / 2	%	ISO 527-1/-2
Strain at break (-40°C)	2.3 / -	%	ISO 527-1/-2
Strain at break (40°C)	2.3 / -	%	ISO 527-1/-2
Strain at break (80°C)	2.6 / 6	%	ISO 527-1/-2
Strain at break (100°C)	3.2 / -	%	ISO 527-1/-2
Strain at break (120°C)	4.3 / 5	%	ISO 527-1/-2
Strain at break (150°C)	6	%	ISO 527-1/-2
Strain at break (160°C)	6	%	ISO 527-1/-2
Strain at break (180°C)	6	%	ISO 527-1/-2
Strain at break (200°C)	6	%	ISO 527-1/-2
Flexural modulus	10500 / 11000	MPa	ISO 178
Flexural strength	300 / 260	MPa	ISO 178
Flexural modulus (120°C)	7600	MPa	ISO 178
Flexural modulus (160°C)	4500	MPa	ISO 178
Flexural modulus (180°C)	4200	MPa	ISO 178
Flexural modulus (200°C)	4000	MPa	ISO 178
Charpy impact strength (+23°C)	60 / 50	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	55 / 45	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 9	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	10 / 9	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)	305 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.33	E-4/°C	ASTM D696
Coeff. of linear therm. expansion (normal)	0.4	E-4/°C	ASTM D696

ELECTRICAL PROPERTIES

DRY / COND

Property Data

ForTii[®] Care P1G6

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Volume resistivity	>1E13 / >1E13	Ohm*m	IEC 62631-3-1
Electric strength	35 / 35	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	V	IEC 60112
OTHER PROPERTIES	DRY / COND		
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1430 / -	kg/m³	ISO 1183