

Xytron™ G3010E

PPS—I—GF30

30% Glass Reinforced, High Impact, Food Contact Quality, Drinking Water Grade

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	VALUE		
Molding shrinkage (parallel)	0.2	%	ISO 294-4
Molding shrinkage (normal)	0.65	%	ISO 294-4
MECHANICAL PROPERTIES			
	VALUE		
Tensile modulus	9500	MPa	ISO 527-1/-2
Tensile modulus (120°C)	4600	MPa	ISO 527-1/-2
Tensile modulus (160°C)	2600	MPa	ISO 527-1/-2
Tensile modulus (200°C)	2000	MPa	ISO 527-1/-2
Stress at break	145	MPa	ISO 527-1/-2
Stress at break (120°C)	65	MPa	ISO 527-1/-2
Stress at break (160°C)	50	MPa	ISO 527-1/-2
Stress at break (200°C)	45	MPa	ISO 527-1/-2
Strain at break	2.6	%	ISO 527-1/-2
Strain at break (120°C)	7	%	ISO 527-1/-2
Strain at break (160°C)	8.6	%	ISO 527-1/-2
Strain at break (200°C)	9.1	%	ISO 527-1/-2
Flexural modulus	8000	MPa	ISO 178
Flexural strength	210	MPa	ISO 178
Flexural modulus (120°C)	6900	MPa	ISO 178
Flexural modulus (160°C)	2700	MPa	ISO 178
Flexural modulus (200°C)	2100	MPa	ISO 178
Charpy impact strength (+23°C)	65	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	75	kJ/m²	ISO 179/1eU

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Charpy notched impact strength (+23°C)	18.5	kJ/m²	ISO 179/1eA
Charpy notched impact strength (−30°C)	11	kJ/m²	ISO 179/1eA
Izod impact strength (+23°C)	65	kJ/m²	ISO 180/1U
Izod notched impact strength (+23°C)	18	kJ/m²	ISO 180/1A
Izod notched impact strength (−40°C)	12.5	kJ/m²	ISO 180/1A

THERMAL PROPERTIES	VALUE		
Melting temperature (10°C/min)	280	°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)	0.18	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.6	E-4/°C	ISO 11359-1/-2
Coef. of lin. therm expansion, parallel, above Tg	0.14	E-4/°C	ISO 11359-1/-2
Coef. of lin. therm expansion, normal, above Tg	1.1	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
UL recognition	Yes	—	—
Burning Behav. at 3.0 mm nom. thickn.	V-0	class	IEC 60695-11-10
UL recognition	Yes	—	—

ELECTRICAL PROPERTIES	VALUE		
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	36	kV/mm	IEC 60243-1
Comparative tracking index	175	V	IEC 60112
Dissipation factor (5GHz)	50	E-4	IEC 61189-2-721
Relative permittivity (5GHz)	3.6	—	IEC 61189-2-721

OTHER PROPERTIES	VALUE		
Density	1450	kg/m³	ISO 1183
Humidity absorption	0.04	%	Sim. to ISO 62