

Xytron™ M6510A

PPS—(GF+MD)65

65% Glass/Mineral Reinforced, Flame Retardant, Excellent Dimensional Stability

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	VALUE		
Molding shrinkage (parallel)	0.3	%	ISO 294-4
Molding shrinkage (normal)	0.5	%	ISO 294-4
MECHANICAL PROPERTIES	VALUE		
Tensile modulus	20000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	11000	MPa	ISO 527-1/-2
Tensile modulus (160°C)	8900	MPa	ISO 527-1/-2
Tensile modulus (180°C)	8000	MPa	ISO 527-1/-2
Tensile modulus (200°C)	7700	MPa	ISO 527-1/-2
Stress at break	145	MPa	ISO 527-1/-2
Stress at break (120°C)	98	MPa	ISO 527-1/-2
Stress at break (160°C)	75	MPa	ISO 527-1/-2
Stress at break (180°C)	70	MPa	ISO 527-1/-2
Stress at break (200°C)	62	MPa	ISO 527-1/-2
Strain at break	1	%	ISO 527-1/-2
Strain at break (120°C)	1.7	%	ISO 527-1/-2
Strain at break (160°C)	2.4	%	ISO 527-1/-2
Strain at break (180°C)	2.5	%	ISO 527-1/-2
Strain at break (200°C)	2.5	%	ISO 527-1/-2
Flexural modulus	20000	MPa	ISO 178
Flexural strength	230	MPa	ISO 178
Flexural modulus (120°C)	14000	MPa	ISO 178
Flexural modulus (160°C)	9100	MPa	ISO 178

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Flexural modulus (200°C)	7000	MPa	ISO 178
Charpy impact strength (+23°C)	25	kJ/m²	ISO 179/1eU
Charpy impact strength (−30°C)	27	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6.5	kJ/m²	ISO 179/1eA
Charpy notched impact strength (−30°C)	6.8	kJ/m²	ISO 179/1eA
Rockwell hardness, R scale	120	—	ISO 2039-2
Rockwell hardness, M scale	101	—	ISO 2039-2

THERMAL PROPERTIES	VALUE		
Melting temperature (10°C/min)	280	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	277	°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)	0.27	E-4/°C	ISO 11359-1/-2
Coef. of lin. therm expansion, parallel, above Tg	0.15	E-4/°C	ISO 11359-1/-2
Coef. of lin. therm expansion, normal, above Tg	0.75	E-4/°C	ISO 11359-1/-2
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 3.0 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
UL recognition	Yes	—	—
Relative Temperature Index – electrical	130	°C	UL746B
RTI electrical (Thickness (1) tested)	0.7	mm	UL746B
Thermal conductivity in plane	0.7	W/(m K)	ASTM E1461
Thermal conductivity through plane	0.7	W/(m K)	ASTM E1461

ELECTRICAL PROPERTIES	VALUE		
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	25	kV/mm	IEC 60243-1

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Comparative tracking index	225	V	IEC 60112
Dissipation factor (5GHz)	44	E-4	IEC 61189-2-721
Relative permittivity (5GHz)	5	—	IEC 61189-2-721
OTHER PROPERTIES	VALUE		
Density	1970	kg/m³	ISO 1183