

Xytron™ G4080HR

PPS–GF40

40% Glass Reinforced, Flame Retardant, Hydrolysis resistant

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	VALUE		
Molding shrinkage (parallel)	0.2	%	ISO 294–4
Molding shrinkage (normal)	0.5	%	ISO 294–4
MECHANICAL PROPERTIES	VALUE		
Tensile modulus	15000	MPa	ISO 527–1/–2
Tensile modulus (120°C)	6300	MPa	ISO 527–1/–2
Tensile modulus (160°C)	4400	MPa	ISO 527–1/–2
Tensile modulus (200°C)	3500	MPa	ISO 527–1/–2
Stress at break	190	MPa	ISO 527–1/–2
Stress at break (120°C)	85	MPa	ISO 527–1/–2
Stress at break (160°C)	62	MPa	ISO 527–1/–2
Stress at break (200°C)	50	MPa	ISO 527–1/–2
Strain at break	2	%	ISO 527–1/–2
Strain at break (120°C)	4.5	%	ISO 527–1/–2
Strain at break (160°C)	5.1	%	ISO 527–1/–2
Strain at break (200°C)	5.8	%	ISO 527–1/–2
Flexural modulus	14000	MPa	ISO 178
Flexural strength	290	MPa	ISO 178
Flexural modulus (120°C)	5800	MPa	ISO 178
Flexural modulus (160°C)	4400	MPa	ISO 178
Flexural modulus (200°C)	3900	MPa	ISO 178
Charpy impact strength (+23°C)	60	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	70	kJ/m²	ISO 179/1eU

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Charpy notched impact strength (+23°C)	10.5	kJ/m²	ISO 179/1eA
Charpy notched impact strength (−30°C)	10	kJ/m²	ISO 179/1eA
Izod impact strength (+23°C)	55	kJ/m²	ISO 180/1U
Izod notched impact strength (+23°C)	11.5	kJ/m²	ISO 180/1A
Izod notched impact strength (−40°C)	10.5	kJ/m²	ISO 180/1A
Rockwell hardness, R scale	120	—	ISO 2039–2
Rockwell hardness, M scale	100	—	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)	265	°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)	0.4	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	1.1	E–4/°C	ISO 11359–1/–2

ELECTRICAL PROPERTIES	VALUE		
Volume resistivity	>1E13	Ohm*m	IEC 62631–3–1
Electric strength	31	kV/mm	IEC 60243–1
Comparative tracking index	175	V	IEC 60112
Dissipation factor (5GHz)	55	E–4	IEC 61189–2–721
Relative permittivity (5GHz)	4	—	IEC 61189–2–721

OTHER PROPERTIES	VALUE		
Density	1650	kg/m³	ISO 1183
Humidity absorption	0.04	%	Sim. to ISO 62