Property Data

Envalior
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Xytron™ G4080HRE

PPS–I–GF40

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	13300	MPa	ISO 527–1/–2
Tensile modulus (120°C)	6100	MPa	ISO 527–1/–2
Tensile modulus (160°C)	4700	MPa	ISO 527–1/–2
Tensile modulus (200°C)	4000	MPa	ISO 527–1/–2
Stress at break	180	MPa	ISO 527–1/–2
Stress at break (120°C)	80	MPa	ISO 527–1/–2
Stress at break (160°C)	60	MPa	ISO 527–1/–2
Stress at break (200°C)	46	MPa	ISO 527–1/–2
Strain at break	2.4	%	ISO 527–1/–2
Strain at break (120°C)	4.1	%	ISO 527–1/–2
Strain at break (160°C)	4.3	%	ISO 527–1/–2
Strain at break (200°C)	3.9	%	ISO 527–1/–2
Flexural modulus	12200	MPa	ISO 178
Flexural strength	267	MPa	ISO 178
Flexural modulus (120°C)	5900	MPa	ISO 178
Flexural modulus (160°C)	4600	MPa	ISO 178
Flexural modulus (200°C)	4000	MPa	ISO 178
Charpy impact strength (+23°C)	60	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	65	kJ/m²	ISO 179/1eU

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Charpy notched impact strength (+23°C)	13	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	12	kJ/m²	ISO 179/1eA
Izod impact strength (+23°C)	60	kJ/m²	ISO 180/1U
Izod notched impact strength (+23°C)	16	kJ/m²	ISO 180/1A
Izod notched impact strength (–40°C)	13	kJ/m²	ISO 180/1A
Rockwell hardness, R scale	117	–	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)	266	°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)	0.48	E–4/°C	ISO 11359–1/–2
Coef. of lin. therm expansion, parallel, above Tg	0.11	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 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	33	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)	3.8	–	IEC 61189–2–721

OTHER PROPERTIES	VALUE		
Density	1600	kg/m³	ISO 1183