Property Data

Envalior
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Akulon® K224-PG8

PA6-I-GF40

40% Glass Fiber Reinforced, Impact Modified

Print Date: 2025-03-29

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.35 / *	%	ISO 294-4
Molding shrinkage (normal)	0.81 / *	%	ISO 294-4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	11500 / 6500	MPa	ISO 527-1/-2
Stress at break	175 / 125	MPa	ISO 527-1/-2
Strain at break	4.5 / 8.3	%	ISO 527-1/-2
Flexural modulus	11200 / 7000	MPa	ISO 178
Flexural strength	295 / 170	MPa	ISO 178
Charpy impact strength (+23°C)	105 / 110	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	110 / 110	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	25 / 35	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	16 / 16	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES	DRY / COND		
Temp. of deflection under load (1.80 MPa)	200 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.65 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10

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PROPERTIES	*TYPICAL DATA*	*UNIT*	*TEST METHOD*
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695–11–10
Thickness tested	0.75 / *	mm	IEC 60695–11–10
ELECTRICAL PROPERTIES	***DRY / COND***		
Relative permittivity (100Hz)	3.5 / 14	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3.3 / 4.5	–	IEC 62631–2–1
Dissipation factor (100 Hz)	90 / 3000	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	150 / 1200	E–4	IEC 62631–2–1
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 62631–3–1
Surface resistivity	– / 1E14	Ohm	IEC 62631–3–2
Electric strength	35 / 30	kV/mm	IEC 60243–1
Comparative tracking index	– / 600	V	IEC 60112
OTHER PROPERTIES	***DRY / COND***		
Water absorption	4.9 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1430 / –	kg/m³	ISO 1183