**Property Data** 



Print Date: 2024-04-16

## Akulon<sup>®</sup> K224–G0

PA6-GF50

50% Glass Reinforced

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	1.2 / *	%	ISO 294-4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	16500 / 10500	MPa	ISO 527-1/-2
Stress at break	220 / 150	MPa	ISO 527-1/-2
Strain at break	3 / 4.5	%	ISO 527-1/-2
Flexural modulus	16000 / -	MPa	ISO 178
Flexural strength	360 / -	MPa	ISO 178
Charpy impact strength (+23°C)	100 / 105	kJ∕m²	ISO 179/1eU
Charpy impact strength (-30°C)	95 / 95	kJ∕m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	20 / 22	kJ∕m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	15 / 15	kJ∕m²	ISO 179/1eA
THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	210 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.1 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.5 / *	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

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
Glow Wire Flammability Index GWFI	700 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	2 / -	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	700 / -	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.5 / -	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	725 / -	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	2/-	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	725 / -	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	1.5 / -	mm	IEC 60695-2-13
ELECTRICAL PROPERTIES	DRY / COND		
<b>ELECTRICAL PROPERTIES</b> Relative permittivity (100Hz)	<i>DRY / COND</i> 3.5 / 14	_	IEC 62631-2-1
		_	IEC 62631-2-1 IEC 62631-2-1
Relative permittivity (100Hz)	3.5 / 14	_  E-4	
Relative permittivity (100Hz) Relative permittivity (1 MHz)	3.5 / 14 5.2 / 4.5	_ _ E-4 E-4	IEC 62631-2-1
Relative permittivity (100Hz) Relative permittivity (1 MHz) Dissipation factor (100 Hz)	3.5 / 14 5.2 / 4.5 50 / 3000		IEC 62631-2-1 IEC 62631-2-1
Relative permittivity (100Hz) Relative permittivity (1 MHz) Dissipation factor (100 Hz) Dissipation factor (1 MHz)	3.5 / 14 5.2 / 4.5 50 / 3000 150 / 1200	E-4	IEC 62631–2–1 IEC 62631–2–1 IEC 62631–2–1
Relative permittivity (100Hz)Relative permittivity (1 MHz)Dissipation factor (100 Hz)Dissipation factor (1 MHz)Volume resistivity	3.5 / 14 5.2 / 4.5 50 / 3000 150 / 1200 1E13 / 1E11	E-4 Ohm*m	IEC 62631–2–1 IEC 62631–2–1 IEC 62631–2–1 IEC 62631–3–1
Relative permittivity (100Hz)Relative permittivity (1 MHz)Dissipation factor (100 Hz)Dissipation factor (1 MHz)Volume resistivitySurface resistivity	3.5 / 14 5.2 / 4.5 50 / 3000 150 / 1200 1E13 / 1E11 - / 1E14	E-4 Ohm*m Ohm	IEC 62631–2–1 IEC 62631–2–1 IEC 62631–2–1 IEC 62631–3–1 IEC 62631–3–2
Relative permittivity (100Hz)Relative permittivity (1 MHz)Dissipation factor (100 Hz)Dissipation factor (1 MHz)Volume resistivitySurface resistivityElectric strength	3.5 / 14 5.2 / 4.5 50 / 3000 150 / 1200 1E13 / 1E11 - / 1E14 35 / 25	E-4 Ohm*m Ohm kV/mm	IEC 62631–2–1 IEC 62631–2–1 IEC 62631–2–1 IEC 62631–3–1 IEC 62631–3–2 IEC 60243–1
Relative permittivity (100Hz)Relative permittivity (1 MHz)Dissipation factor (100 Hz)Dissipation factor (1 MHz)Volume resistivitySurface resistivityElectric strengthComparative tracking index	3.5 / 14 5.2 / 4.5 50 / 3000 150 / 1200 1E13 / 1E11 - / 1E14 35 / 25 * / 600	E-4 Ohm*m Ohm kV/mm	IEC 62631–2–1 IEC 62631–2–1 IEC 62631–2–1 IEC 62631–3–1 IEC 62631–3–2 IEC 60243–1

Density

1560 / -

kg∕m³

ISO 1183

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