

Akulon® K224-TG9

PA6-GF45

45% Glass Reinforced

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage (parallel)	0.15 / *	%	ISO 294-4
Molding shrinkage (normal)	0.95 / *	%	ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	14500 / 10000	MPa	ISO 527-1/-2
Stress at break	223 / 150	MPa	ISO 527-1/-2
Strain at break	4 / 6	%	ISO 527-1/-2
Tensile modulus (200°C)	4400	MPa	ISO 527-1/-2
Stress at break (200°C)	49	MPa	ISO 527-1/-2
Strain at break (200°C)	8	%	ISO 527-1/-2
Charpy impact strength (+23°C)	100 / 115	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	95 / 95	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	20 / 35	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	13 / 13	kJ/m ²	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)	0.2 / *	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



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Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10
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

Electrical properties

dry / cond

Relative permittivity (100Hz)	3.5 / 14	-	IEC 62631-2-1
Relative permittivity (1 MHz)	5.2 / 4.5	-	IEC 62631-2-1
Dissipation factor (100 Hz)	50 / 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	25 / 20	kV/mm	IEC 60243-1
Comparative tracking index	600 / 600	V	IEC 60112

Other properties

dry / cond

Water absorption	5 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1510 / -	kg/m ³	ISO 1183

