

# Akulon® K224-TG9

## PA6-GF45

45% Glass Reinforced

Print Date: 2017-11-03

Properties	Typical Data	Unit	Test Method
<b>Rheological properties</b>			<b>dry / cond</b>
Molding shrinkage (parallel)	0.15 / *	%	ISO 294-4
Molding shrinkage (normal)	0.95 / *	%	ISO 294-4
<b>Mechanical properties</b>			<b>dry / cond</b>
Tensile modulus	14500 / 10000	MPa	ISO 527-1/-2
Stress at break	215 / 150	MPa	ISO 527-1/-2
Strain at break	3 / 6	%	ISO 527-1/-2
Charpy impact strength (+23°C)	100 / 115	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	95 / 95	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	20 / 35	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	13 / 13	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			<b>dry / cond</b>
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
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10

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# Property Data

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Properties	Typical Data	Unit	Test Method
<b>Electrical properties</b>			<b>dry / cond</b>
Relative permittivity (100Hz)	3.5 / 14	-	IEC 60250
Relative permittivity (1 MHz)	5.2 / 4.5	-	IEC 60250
Dissipation factor (100 Hz)	50 / 3000	E-4	IEC 60250
Dissipation factor (1 MHz)	150 / 1200	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	25 / 20	kV/mm	IEC 60243-1
Comparative tracking index	600 / 600	V	IEC 60112
<b>Other properties</b>			<b>dry / cond</b>
Water absorption	5 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1510 / -	kg/m <sup>3</sup>	ISO 1183

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