

Akulon® K224-Go

PA6-GF50

50% Glass Reinforced

Print Date: 2019-09-06

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	13000 / -	MPa	ISO 178
Flexural strength	310 / -	MPa	ISO 178
Charpy impact strength (+23°C)	100 / 105	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 / 22	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	15 / 15	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)	0.1 / *	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 thickness h	HB / *	class	IEC 60695-11-10

Property Data

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Properties	Typical Data	Unit	Test Method
Thickness tested	3 / *	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

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	35 / 25	kV/mm	IEC 60243-1
Comparative tracking index	* / 600	V	IEC 60112

Other properties

dry / cond

Water absorption	4.5 / *	%	Sim. to ISO 62
Humidity absorption	1.4 / *	%	Sim. to ISO 62
Density	1560 / -	kg/m ³	ISO 1183