

Akulon[®] Ultraflow[®] K-FG0

Property Data

PA6-GF50

50% Glass Reinforced, High Flow

Properties	Typical Data	Unit	Test Method
RHEOLOGICAL PROPERTIES			
	dry / cond		
Molding shrinkage (parallel)	0.2 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	dry / cond		
Tensile modulus	16500 / 11000	MPa	ISO 527-1/-2
Stress at break	230 / 155	MPa	ISO 527-1/-2
Strain at break	2.5 / 5	%	ISO 527-1/-2
Flexural modulus	14000 / -	MPa	ISO 178
Flexural strength	310 / -	MPa	ISO 178
Charpy impact strength (+23°C)	90 / 100	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	85 / 85	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / 25	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12 / 12	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	1.6 / *	mm	IEC 60695-11-10
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
Comparative tracking index	600 / -	-	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

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