Akulon® Ultraflow K220-HGM44
PA6-(GF+MD)40

20% Glass Reinforced, 20% Mineral Reinforced, Heat Stabilized

Print Date: 2018-12-13

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	11000 / 6000	MPa	ISO 527-1/-2
Stress at break	135 / 70	MPa	ISO 527-1/-2
Strain at break	2 / 3.5	%	ISO 527-1/-2
Flexural modulus	9000 / -	MPa	ISO 178
Charpy impact strength (+23°C)	40 / 50	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	35 / 35	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	7 / 9	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	4.5 / 4.5	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)	185 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.3 / *	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		

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Properties	Typical Data	Unit	Test Method
Relative permittivity (100Hz)	3.5 / 14	–	IEC 60250
Relative permittivity (1 MHz)	3.3 / 4.5	–	IEC 60250
Dissipation factor (100 Hz)	50 / 4000	E-4	IEC 60250
Dissipation factor (1 MHz)	130 / 1200	E-4	IEC 60250
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 60093
Surface resistivity	* / 1E13	Ohm	IEC 60093
Electric strength	35 / 30	kV/mm	IEC 60243-1
Comparative tracking index	550 / 550	V	IEC 60112

Other properties

	dry / cond		
Water absorption	5.5 / *	%	Sim. to ISO 62
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1470 / –	kg/m³	ISO 1183

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