Akulon® Ultraflow

Akulon® Ultraflow K-FKGS6 /B

PA6-GF30 FR(17)

30% Glass Reinforced, Heat Stabilized, Flame Retardant, High Flow

Print Date: 2016-09-28

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage [parallel]	0.21/*	%	Sim. to ISO 294-4
Molding shrinkage [normal]	0.77/*	%	Sim. to ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	11500/7000	MPa	ISO 527-1/-2
Stress at break	150/100	MPa	ISO 527-1/-2
Strain at break	2.5/5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	60/60	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	60/60	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13/15	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12/12	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)	205/*	°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)	0.2/*	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.1/*	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-0/*	class	IEC 60695-11-10
Thickness tested	1.5/*	mm	IEC 60695-11-10
Burning Behav. at thickness h	V-0/*	class	IEC 60695-11-10
Thickness tested	3/*	mm	IEC 60695-11-10

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Burning Behav. at thickness h	V-0/*	class	IEC 60695-11-10
Thickness tested	0.75/*	mm	IEC 60695-11-10
Glow Wire Flammability Index GWFI	850/-	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.75/-	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	850/-	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	3/-	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	775/-	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.75/-	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	775/-	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	3/-	mm	IEC 60695-2-13
Electrical properties	dry / cond		
Relative permittivity (100Hz)	3.5/10	-	IEC 60250
Relative permittivity (1 MHz)	3.4/4	-	IEC 60250
Dissipation factor (100 Hz)	60/3000	E-4	IEC 60250
Dissipation factor (1 MHz)	120/700	E-4	IEC 60250
Volume resistivity	1E13/1E11	Ohm*m	IEC 60093
Surface resistivity	*/1E14	Ohm	IEC 60093
Comparative tracking index	325/-	V	IEC 60112
Other properties	dry / cond		
Water absorption	4.5/*	%	Sim. to ISO 62
Humidity absorption	1.3/*	%	Sim. to ISO 62
Density	1590/-	kg/m³	ISO 1183