

Akulon® K222-KGV4

PA6-GF20 FR(30)

20% Glass Reinforced, Heat Stabilized, Flame Retardant (halogen- phosphorous-free)

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage (parallel)	0.6 / *	%	ISO 294-4
Molding shrinkage (normal)	1 / *	%	ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	6000 / 2500	MPa	ISO 527-1/-2
Stress at break	85 / 45	MPa	ISO 527-1/-2
Strain at break	3.6 / 15	%	ISO 527-1/-2
Flexural modulus	5700 / 2500	MPa	ISO 178
Flexural strength	140 / 65	MPa	ISO 178
Charpy impact strength (+23°C)	45 / 110	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	35 / 35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	3.5 / 7	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	3 / 3	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)	140 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	210 / *	°C	ISO 75-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10



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Properties	Typical Data	Unit	Test Method
Thickness tested	0.75 / *	mm	IEC 60695-11-10
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	1.6 / -	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1 / -	mm	IEC 60695-2-12

Electrical properties

dry / cond

Relative permittivity (100Hz)	4.3 / 10	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.8 / 3.9	-	IEC 62631-2-1
Dissipation factor (100 Hz)	130 / 3000	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	210 / 1000	E-4	IEC 62631-2-1
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 62631-3-1
Surface resistivity	- / 1E14	Ohm	IEC 62631-3-2
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	575 / *	V	IEC 60112

Other properties

dry / cond

Water absorption	6.5 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1340 / -	kg/m ³	ISO 1183

