

# Akulon® K223-KMV6

## PA6-MD30 FR(17)

30% Mineral Reinforced, Heat Stabilized, Flame Retardant

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Properties	Typical Data	Unit	Test Method
<b>Rheological properties</b>			
	dry / cond		
Molding shrinkage (parallel)	0.63 / *	%	ISO 294-4
Molding shrinkage (normal)	0.63 / *	%	ISO 294-4
<b>Mechanical properties</b>			
	dry / cond		
Tensile modulus	6600 / 3500	MPa	ISO 527-1/-2
Stress at break	70 / 40	MPa	ISO 527-1/-2
Strain at break	2.5 / 4	%	ISO 527-1/-2
Charpy impact strength (+23°C)	35 / 60	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	35 / 35	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	2 / 2	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	2 / 2	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
	dry / cond		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	120 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	205 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.5 / *	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.	V-2 / *	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
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12

Properties	Typical Data	Unit	Test Method
GWFI (Thickness (1) tested)	1 / -	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	3 / -	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	725 / -	°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)	3.6 / 10	-	IEC 60250
Relative permittivity (1 MHz)	3.2 / 3.7	-	IEC 60250
Dissipation factor (100 Hz)	85 / 3000	E-4	IEC 60250
Dissipation factor (1 MHz)	140 / 900	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	375 / 375	V	IEC 60112

**Other properties**

dry / cond

Water absorption	6.2 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1530 / -	kg/m <sup>3</sup>	ISO 1183