

TECHNICAL DATA SHEET

Akulon® K223-KMV6

Envalior
PA6-MD30 FR(17)

Processing

Injection molding

Delivery Form

Pellets

Additives

Release agent

Special Characteristics

Flame retardant, Heat stabilized or stable to heat

Product Text

Product Information

30% Mineral Reinforced, Heat Stabilized, Flame Retardant

ISO 1043 PA6-MD30 FR(17)

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	22	cm ³ /10min	ISO 1133
Temperature	250	°C	
Load	2.16	kg	
Molding shrinkage, parallel	0.63	%	ISO 294-4, 2577
Molding shrinkage, normal	0.63	%	ISO 294-4, 2577
Mechanical Properties	Value	Unit	Standard
Tensile modulus	6600	MPa	ISO 527
Stress at break	70	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	35	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	2	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	2	kJ/m ²	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3

Akulon® K223-KMV6

Envalior

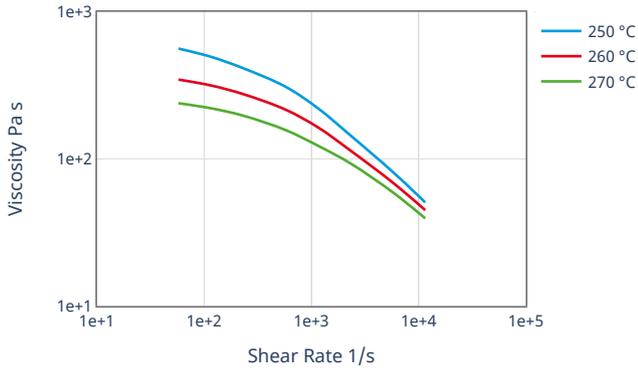
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	120	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	205	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	50	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	50	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-2	class	IEC 60695-11-10
Thickness tested	1.5	mm	
Yellow card available	yes		
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	
Yellow card available	yes		
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.6		IEC 62631-2-1
Relative permittivity, 1MHz	3.2		IEC 62631-2-1
Dissipation factor, 100Hz	85	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	140	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E14	Ohm	IEC 62631-3-2
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	375		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	6.2	%	Sim. to ISO 62
Humidity absorption	1.7	%	Sim. to ISO 62
Density	1530	kg/m ³	ISO 1183

Diagrams

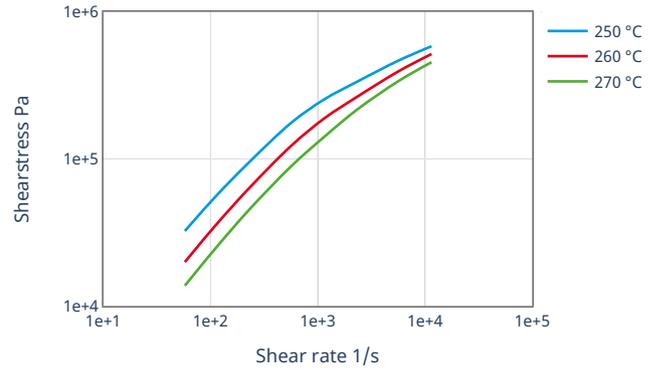
Akulon® K223-KMV6

Envalior

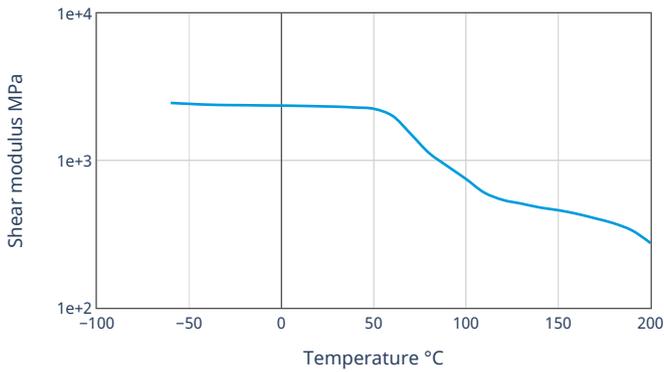
Viscosity-shear rate



Shearstress-shear rate



Dynamic shear modulus-temperature



Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding