

TECHNICAL DATA SHEET

Akulon® K222-KMV5

Envalior
PA6-MD25 FR(30)

Processing

Injection molding

Delivery Form

Pellets

Additives

Release agent

Special Characteristics

Flame retardant, Halogen-free, Heat stabilized or stable to heat

Product Text

Product Information

25% Mineral Reinforced, Heat Stabilized, Flame Retardant (halogen free)

ISO 1043 PA6-MD25 FR(30)

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	20	cm ³ /10min	ISO 1133
Temperature	250	°C	
Load	2.16	kg	
Molding shrinkage, parallel	0.91	%	ISO 294-4, 2577
Molding shrinkage, normal	0.82	%	ISO 294-4, 2577
Density of melt	1170	kg/m ³	
Thermal conductivity of melt	0.201	W/(m K)	
Spec. heat capacity of melt	2250	J/(kg K)	
Eff. thermal diffusivity	7.63E-8	m ² /s	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	6500	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	29	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

Akulon® K222-KMV5

Envalior

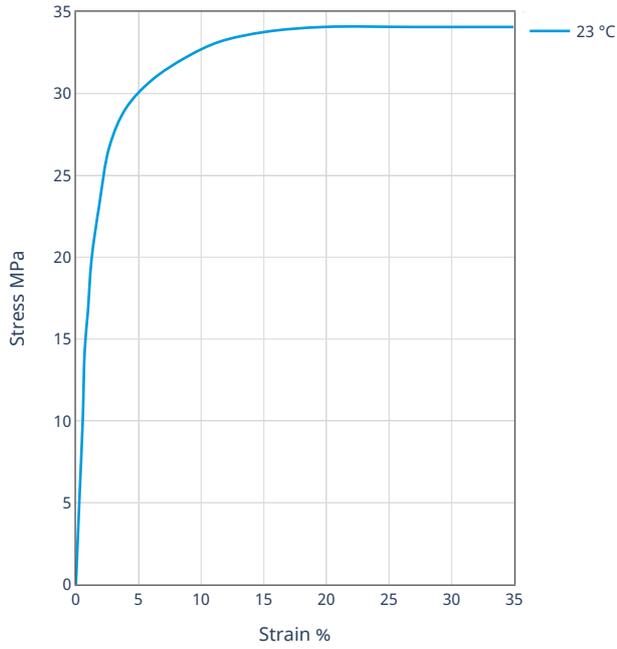
Mechanical Properties	Value	Unit	Standard
Charpy notched impact strength, -30°C	2	kJ/m ²	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	110	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	205	°C	ISO 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-2	class	IEC 60695-11-10
Thickness tested	3	mm	
Yellow card available	yes		
Electrical Properties	Value	Unit	Standard
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Comparative tracking index	600		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	6.2	%	Sim. to ISO 62
Humidity absorption	1.8	%	Sim. to ISO 62
Density	1380	kg/m ³	ISO 1183

Diagrams

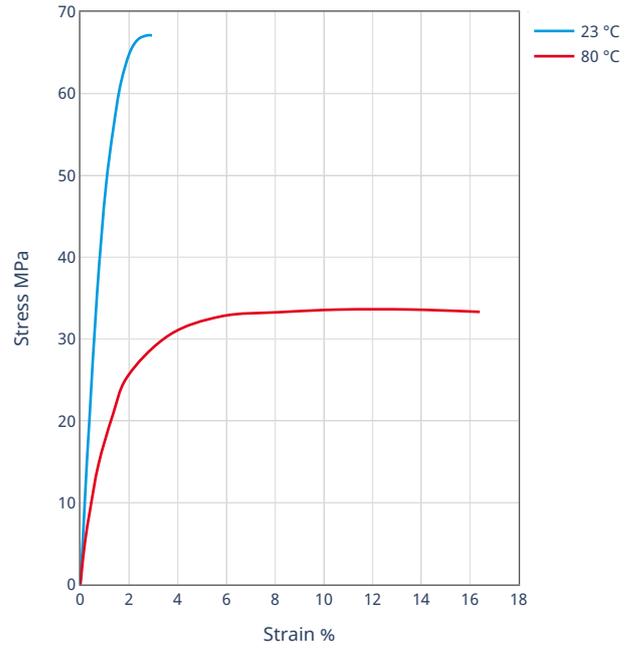
Akulon® K222-KMV5

Envalior

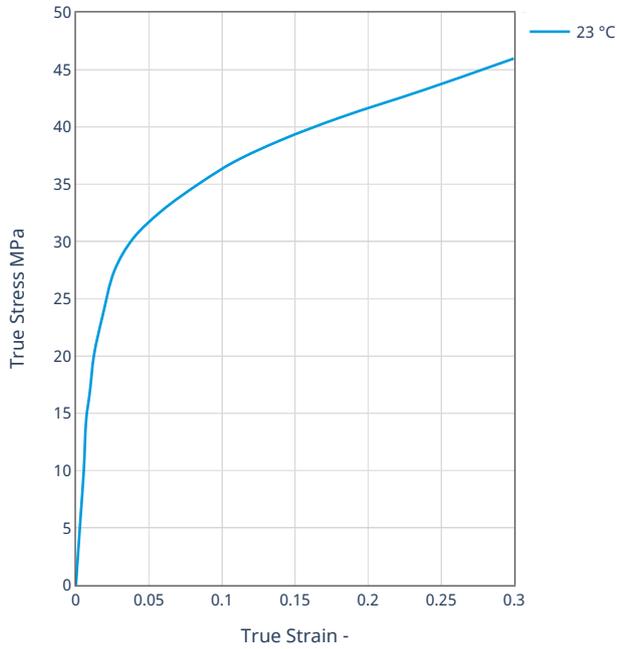
Stress-strain



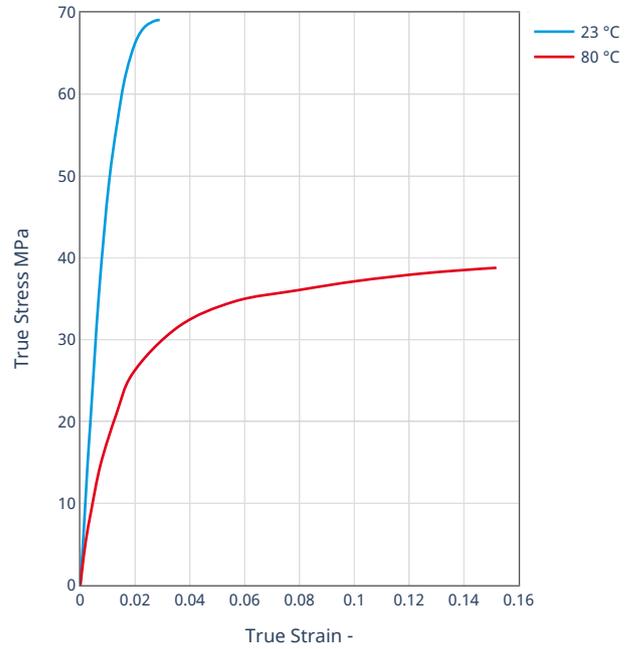
Stress-strain



True stress-true strain



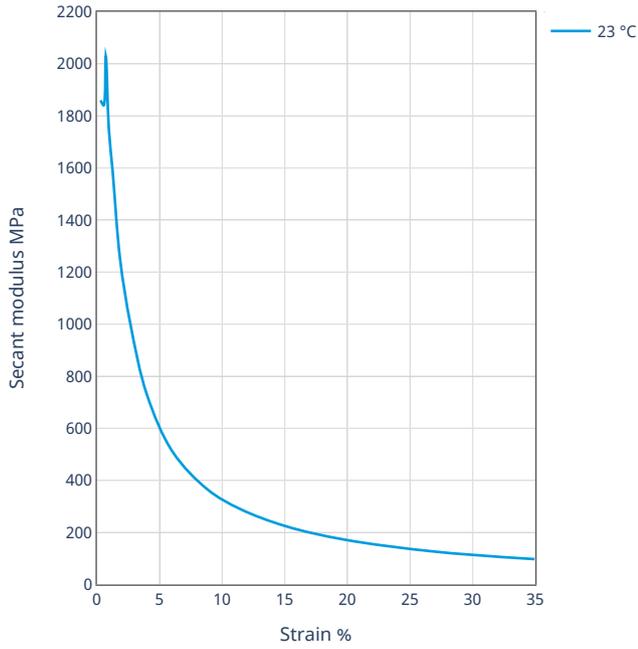
True stress-true strain



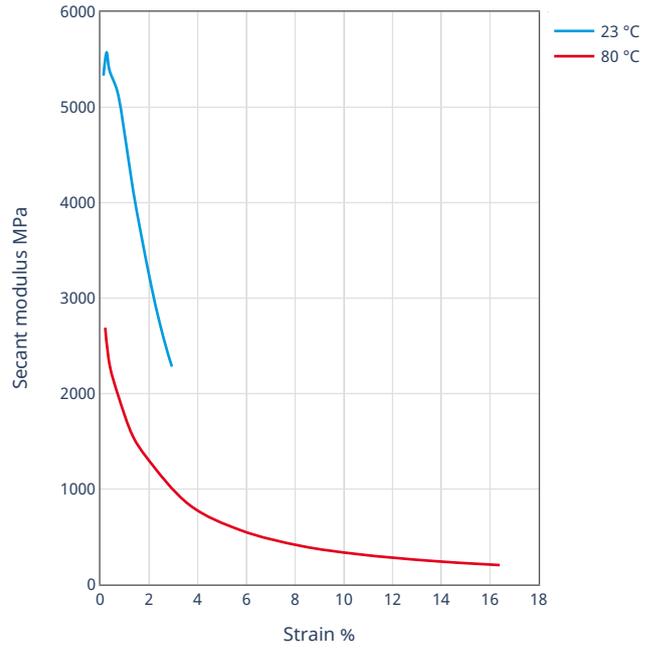
Akulon® K222-KMV5

Envalior

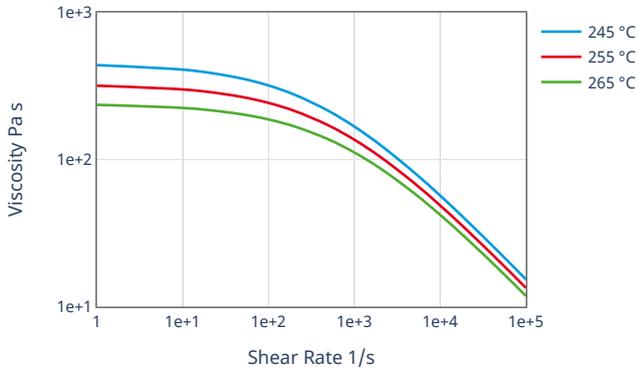
Secant modulus-strain



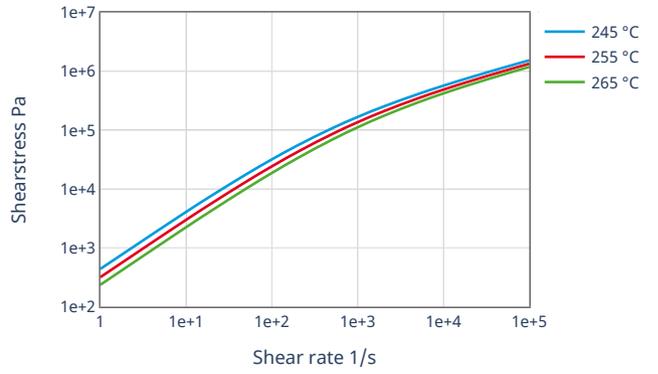
Secant modulus-strain



Viscosity-shear rate

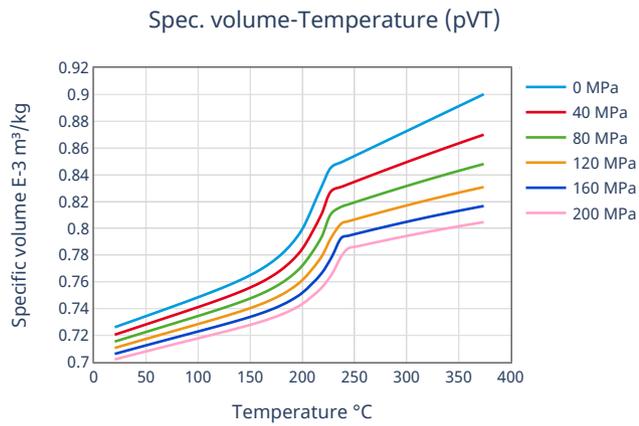


Shearstress-shear rate



Akulon® K222-KMV5

Envalior



Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding