

TECHNICAL DATA SHEET

Akulon® K223-P2

Envalior
PA6-I

Processing

Injection molding

Delivery Form

Pellets

Additives

Release agent

Special Characteristics

High impact or impact modified

Product Text

Product Information

Impact Modified

ISO 1043 PA6-I

Processing/Physical Characteristics	Value	Unit	Standard
Molding shrinkage, parallel	1.37	%	ISO 294-4, 2577
Molding shrinkage, normal	1.45	%	ISO 294-4, 2577
Density of melt	915	kg/m ³	
Thermal conductivity of melt	0.23	W/(m K)	
Spec. heat capacity of melt	2710	J/(kg K)	
Eff. thermal diffusivity	9.28E-8	m ² /s	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	2500	MPa	ISO 527
Yield stress	70	MPa	ISO 527
Yield strain	4	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	16	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA

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Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	55	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	130	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	100	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	140	E-6/K	ISO 11359-1/-2

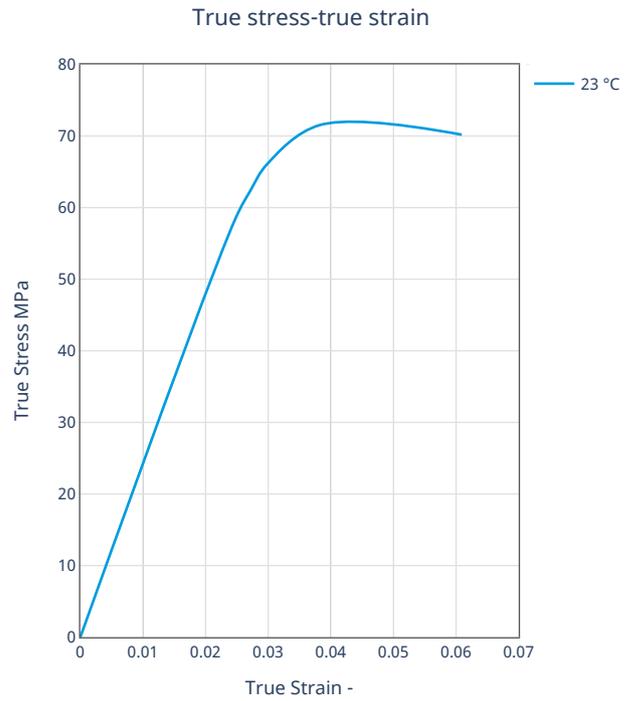
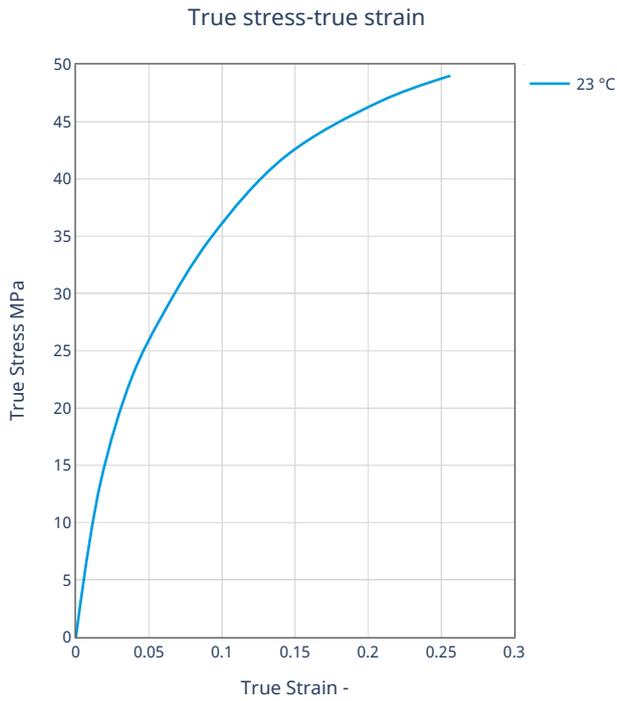
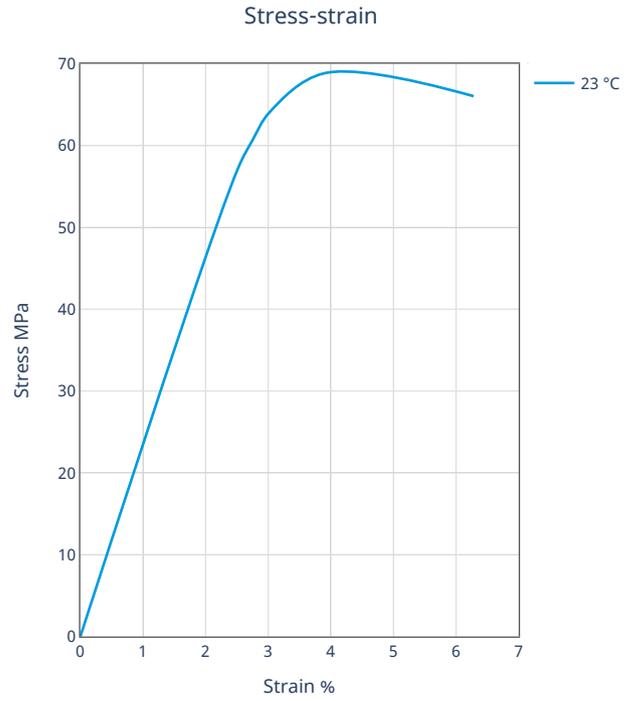
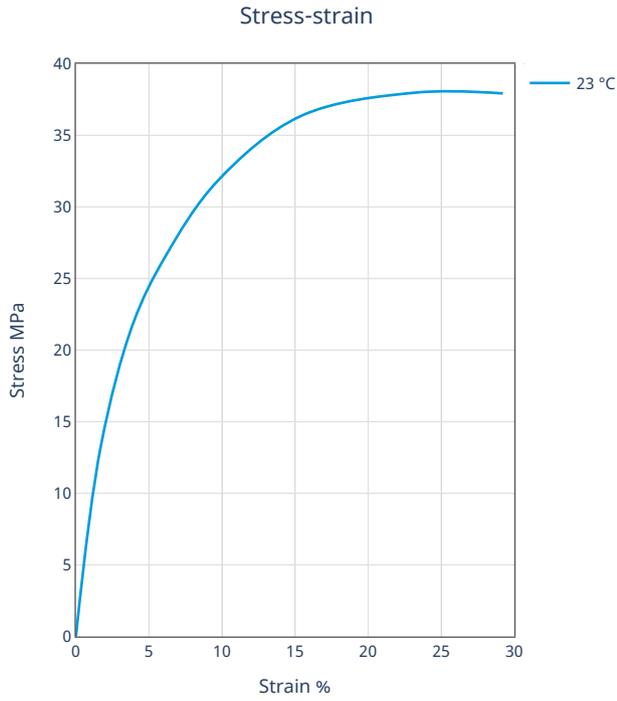
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.4		IEC 62631-2-1
Relative permittivity, 1MHz	3.1		IEC 62631-2-1
Dissipation factor, 100Hz	80	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	200	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E14	Ohm	IEC 62631-3-2
Electric strength	28	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112

Other Properties	Value	Unit	Standard
Water absorption	9	%	Sim. to ISO 62
Humidity absorption	2.5	%	Sim. to ISO 62
Density	1110	kg/m ³	ISO 1183

Diagrams

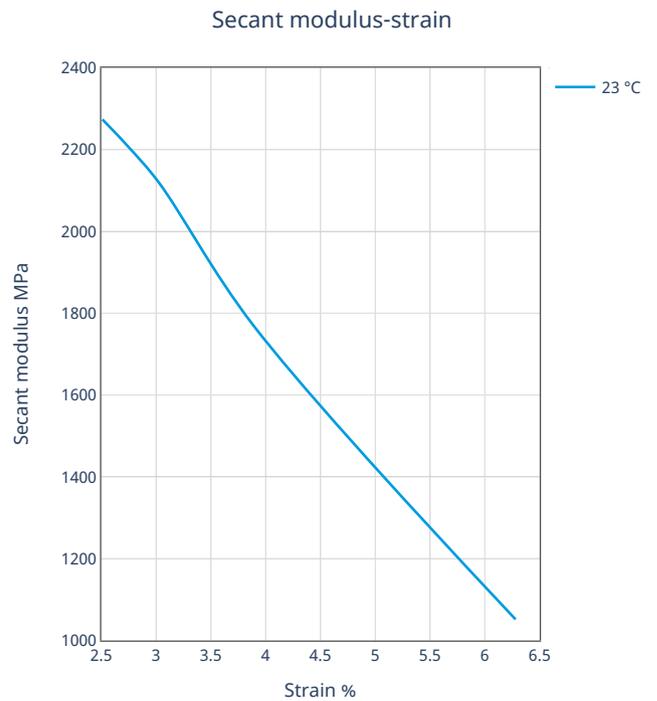
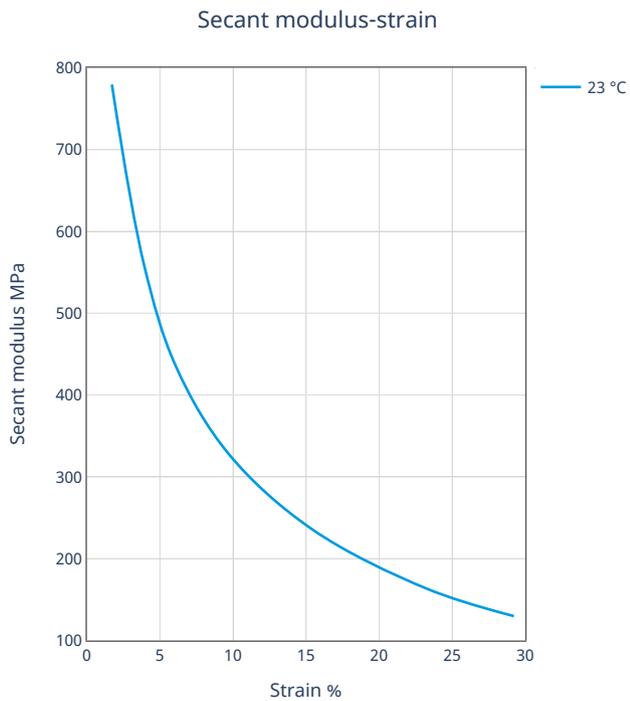
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Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding