

TECHNICAL DATA SHEET

EcoPaXX® Q-KGS6

Envalior
PA410-GF30 FR(40)

Processing

Injection molding

Delivery Form

Granules

Additives

Release agent

Special Characteristics

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

Certifications

Contains renewable resources

Product Text

Product Information

30% Glass Reinforced, Flame Retardant (halogen free)

ISO 1043 PA410-GF30 FR(40)

EcoPaXX® Q-KGS6 is a versatile halogen-free flame-retarded long aliphatic polyamide with UL94 V0 & CTI 600V rating for use in various connectors and housings. It offers excellent retention of electric properties upon humidity uptake

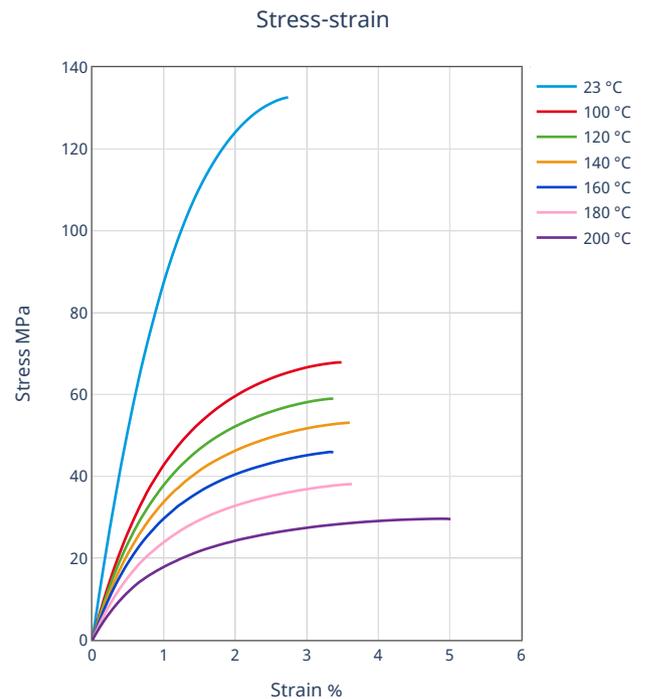
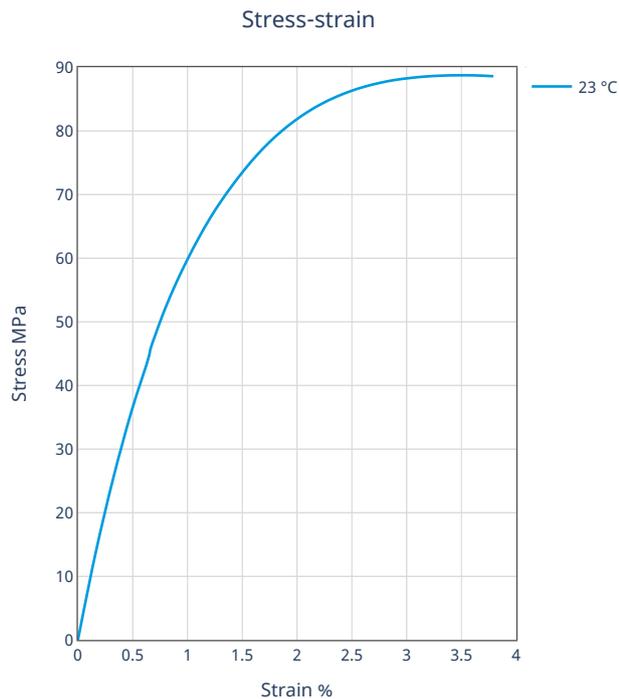
Processing/Physical Characteristics	Value	Unit	Standard
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
Molding shrinkage, normal	1.33	%	ISO 294-4, 2577
Mechanical Properties	Value	Unit	Standard
Tensile modulus	10000	MPa	ISO 527
Stress at break	135	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	40	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	7	kJ/m ²	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	250	°C	ISO 11357-1/-3

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Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	220	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	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
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	6E13	Ohm	IEC 62631-3-2
Electric strength	40	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112
Other Properties	Value	Unit	Standard
Humidity absorption	1.1	%	Sim. to ISO 62
Density	1400	kg/m ³	ISO 1183

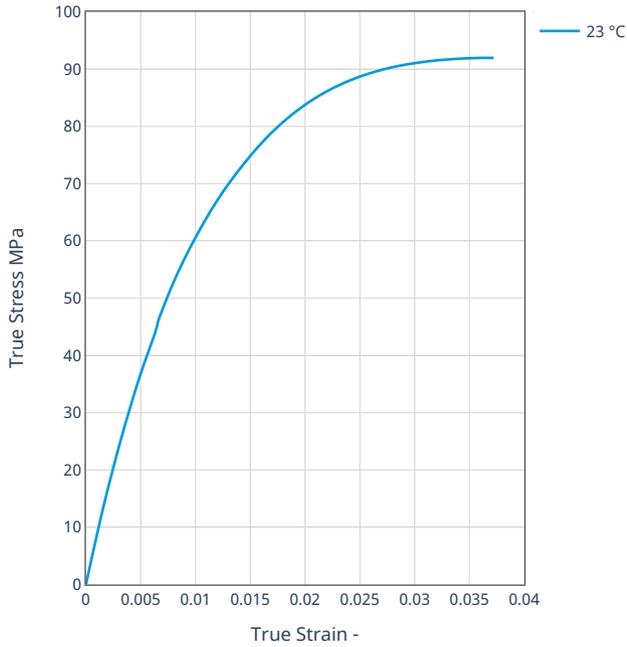
Diagrams



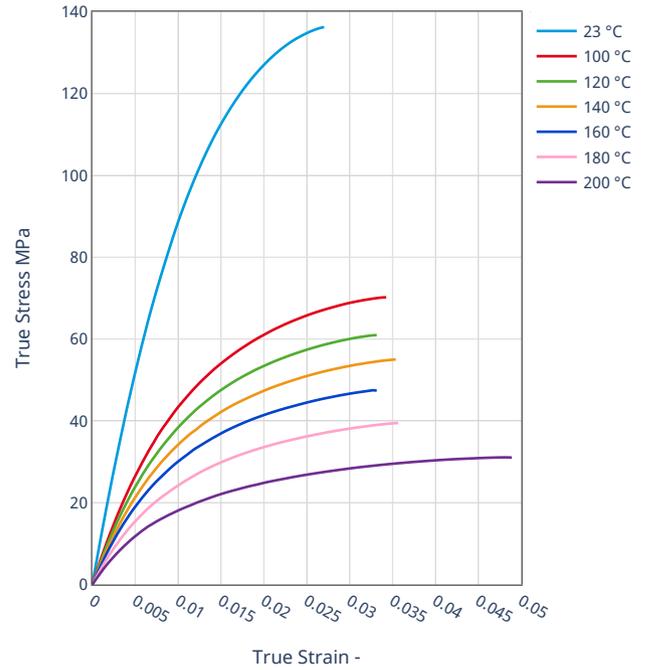
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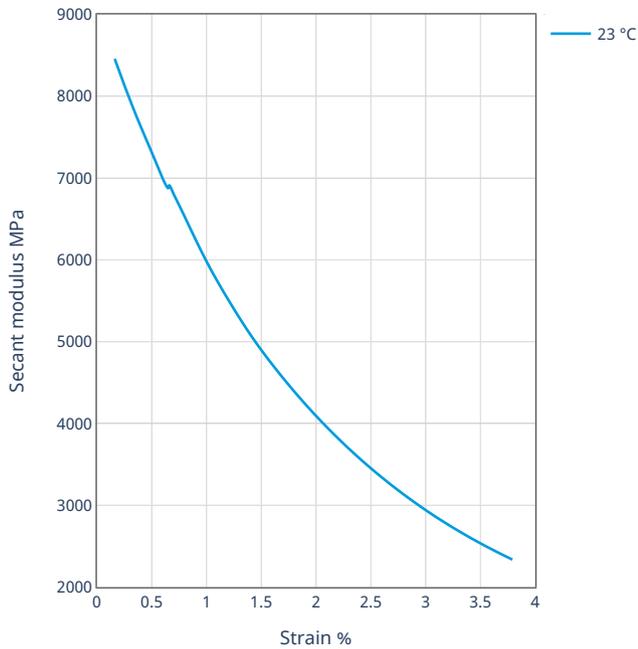
True stress-true strain



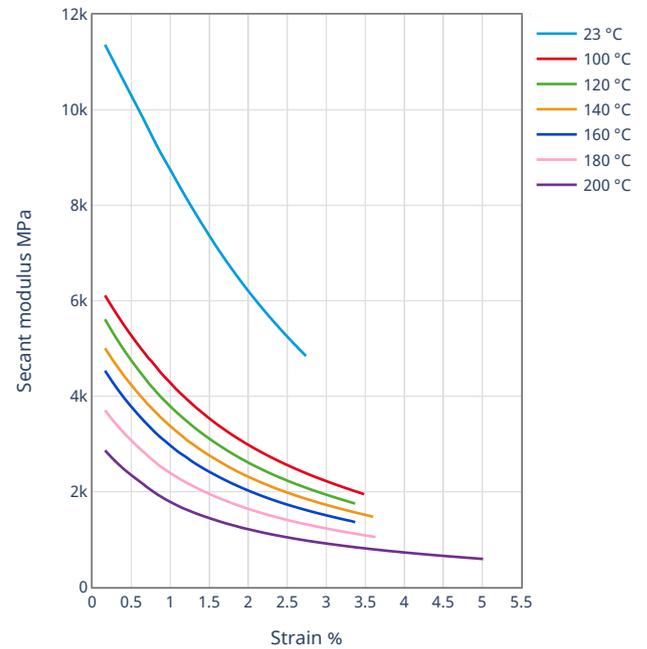
True stress-true strain



Secant modulus-strain



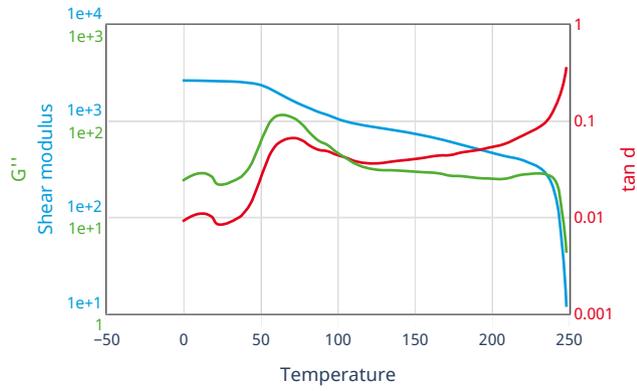
Secant modulus-strain



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Dynamic shear modulus-temperature



Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding