

TECHNICAL DATA SHEET

EcoPaXX® Q-HG6

Envalior
PA410-GF30

Processing

Injection molding

Delivery Form

Granules

Additives

Release agent

Special Characteristics

Heat stabilized or stable to heat

Chemical Resistance

General chemical resistance, Hydrolytically stable

Certifications

Contains renewable resources

Product Text

Product Information

30% Glass Reinforced, Heat Stabilized

ISO 1043 PA410-GF30

EcoPaXX® Q-HG6 is a long aliphatic polyamide with excellent chemical & hydrolysis resistance for use in thermal management applications as well as other structural parts.

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	36	cm ³ /10min	ISO 1133
Temperature	290	°C	
Load	5	kg	
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
Molding shrinkage, normal	1	%	ISO 294-4, 2577
Mechanical Properties	Value	Unit	Standard
Tensile modulus	9200	MPa	ISO 527
Stress at break	180	MPa	ISO 527
Strain at break	3.9	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	80	kJ/m ²	ISO 179/1eU

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Mechanical Properties	Value	Unit	Standard
Charpy impact strength, -30°C	60	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	11	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	9	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	250	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	215	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	243	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	22	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	81	E-6/K	ISO 11359-1/-2

Electrical Properties	Value	Unit	Standard
Volume resistivity	1E12	Ohm*m	IEC 62631-3-1
Surface resistivity	1E13	Ohm	IEC 62631-3-2

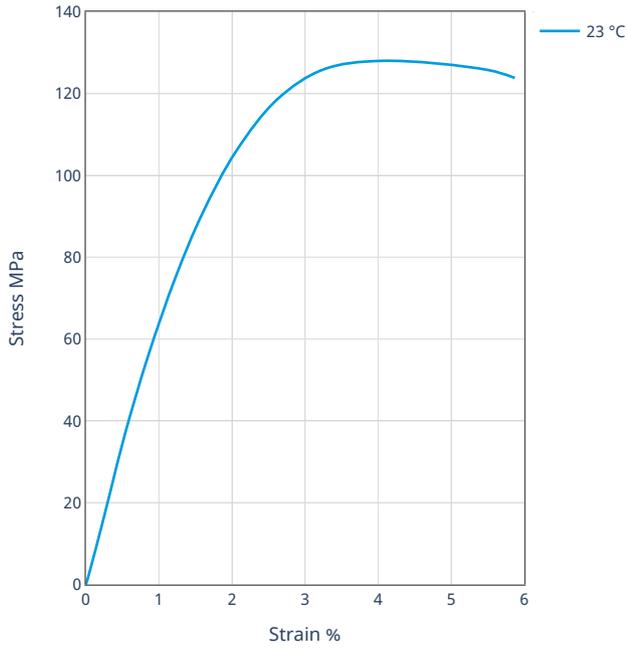
Other Properties	Value	Unit	Standard
Humidity absorption	1.5	%	Sim. to ISO 62
Density	1340	kg/m ³	ISO 1183

Diagrams

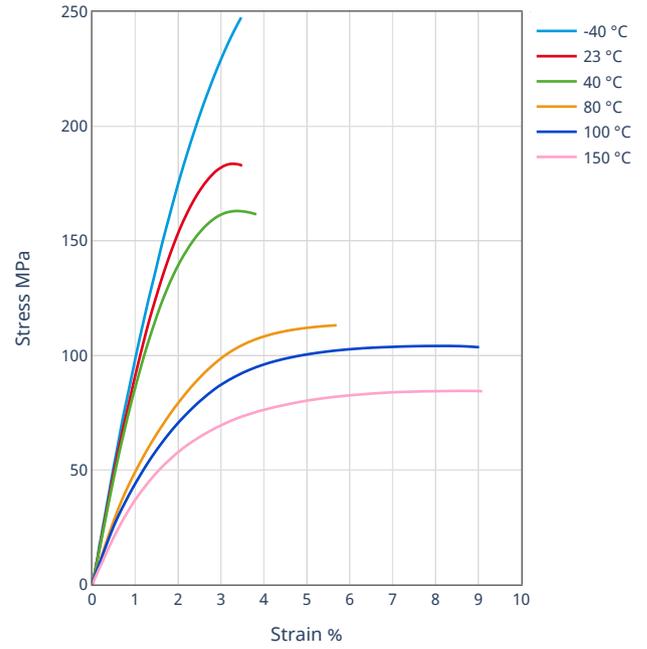
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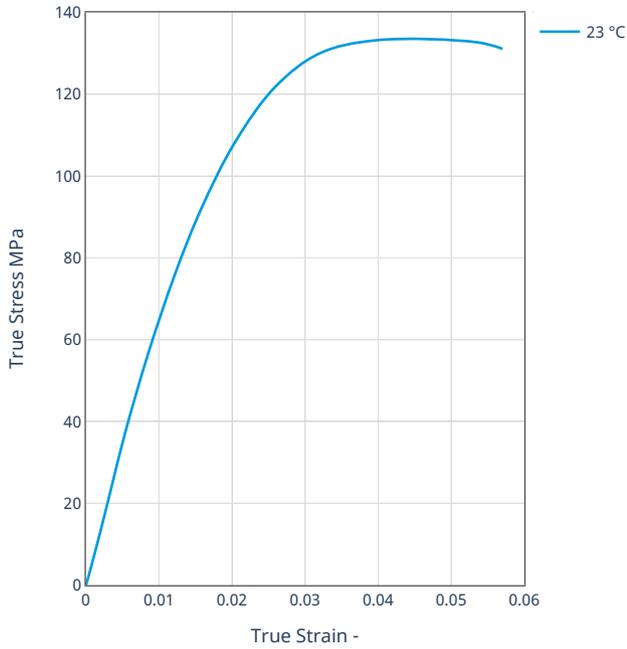
Stress-strain



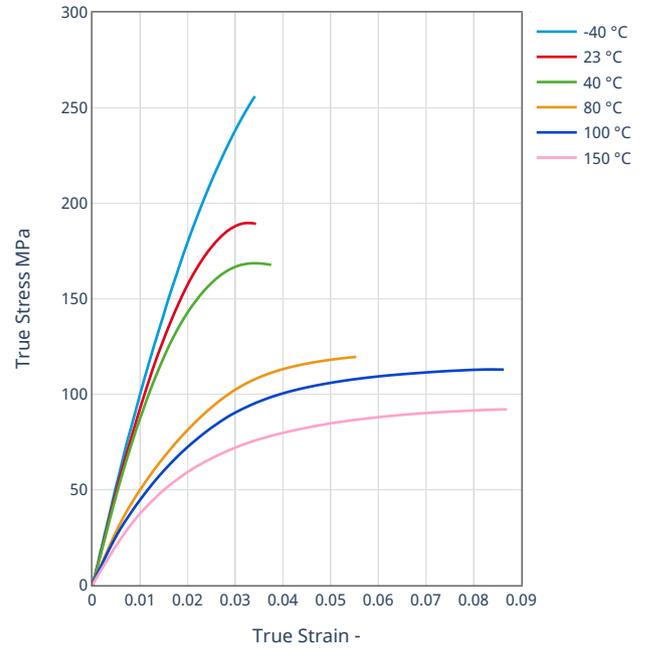
Stress-strain



True stress-true strain



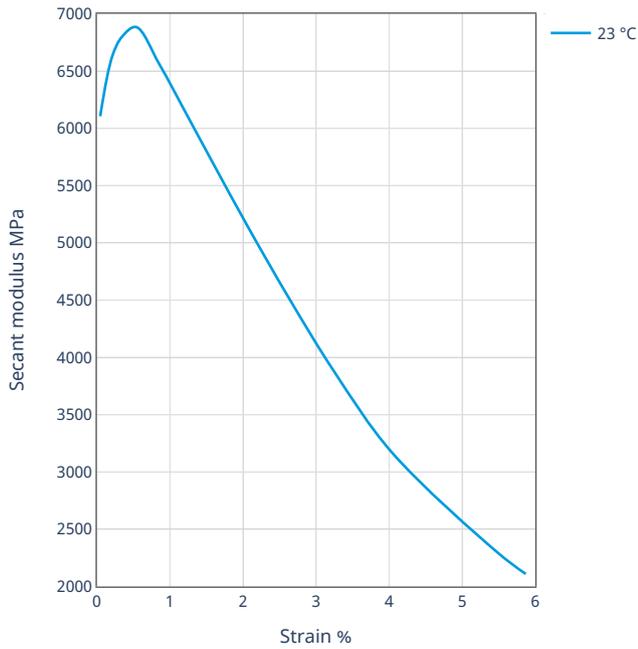
True stress-true strain



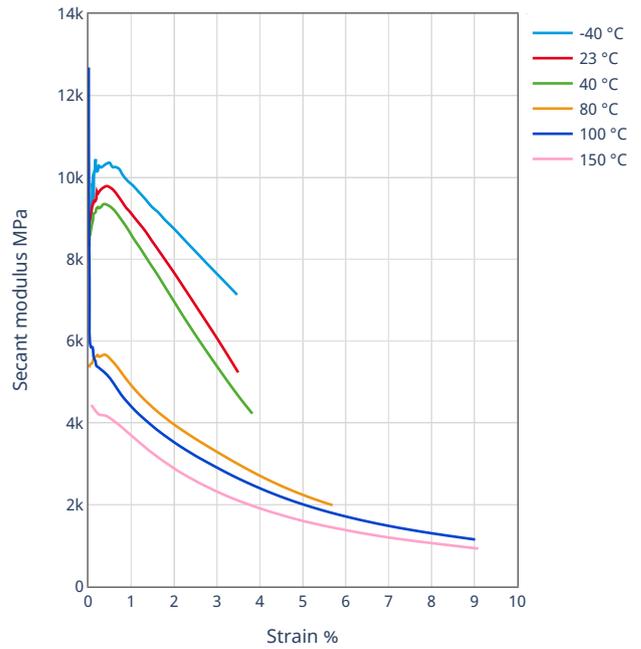
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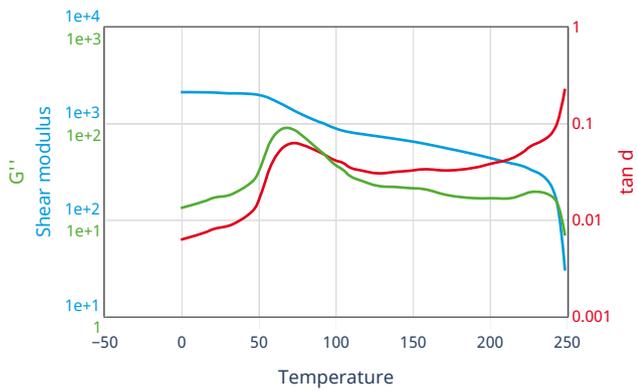
Secant modulus-strain



Secant modulus-strain



Dynamic shear modulus-temperature



Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding