

TECHNICAL DATA SHEET

EcoPaXX® Q-DWX10

Envalior
PA410-GF50

Processing

Injection molding

Granules

Certifications

Contains renewable resources, Recycled resin content,
Food contact, Drinking water contact

Delivery Form

Product Text

Product Information

50% Glass Reinforced, Excellent Surface Properties, Drinking Water Grade, Food Contact Quality

ISO 1043 PA410-GF50

EcoPaXX® Q-DWX10 is a long aliphatic polyamide with excellent mechanical & flow performance for use in food contact & drinking water applications

Processing/Physical Characteristics	Value	Unit	Standard
Molding shrinkage, parallel	0.13	%	ISO 294-4, 2577
Molding shrinkage, normal	0.73	%	ISO 294-4, 2577
Mechanical Properties	Value	Unit	Standard
Tensile modulus	16500	MPa	ISO 527
Stress at break	240	MPa	ISO 527
Strain at break	3	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	100	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	90	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	14	kJ/m ²	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	250	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	85	°C	ISO 11357-1/-2

EcoPaXX® Q-DWX10

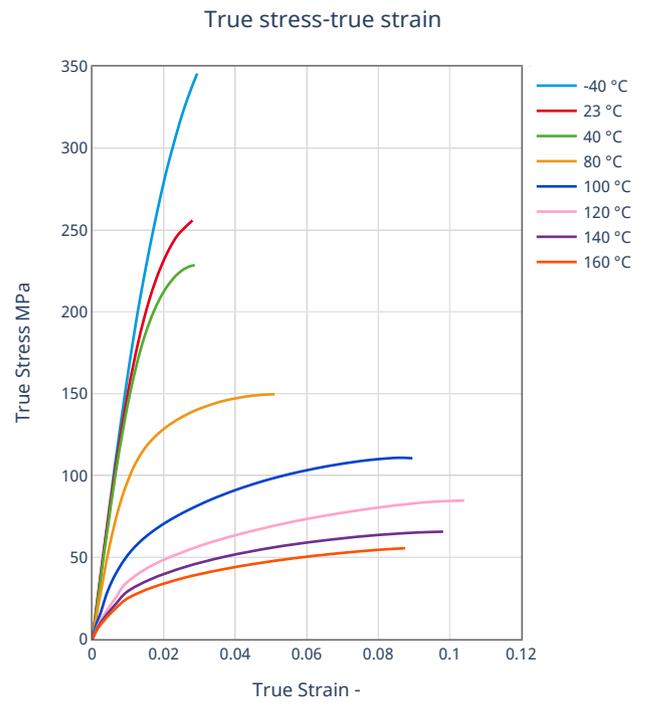
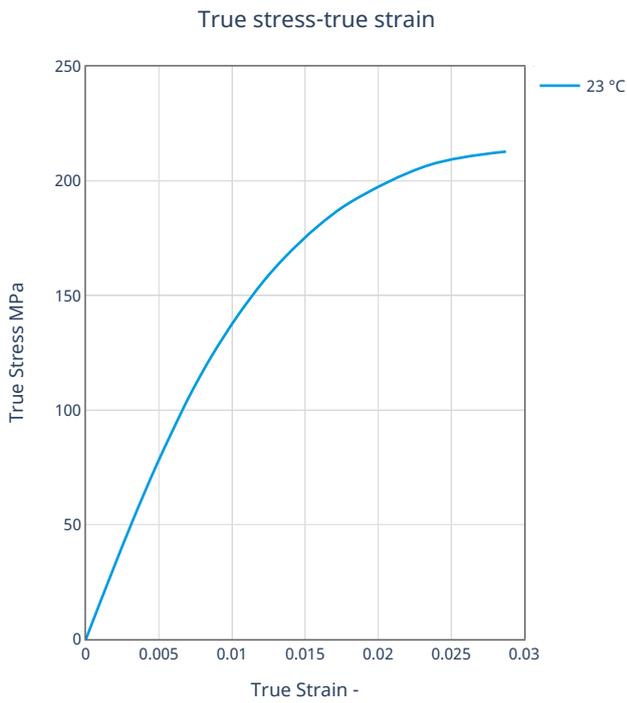
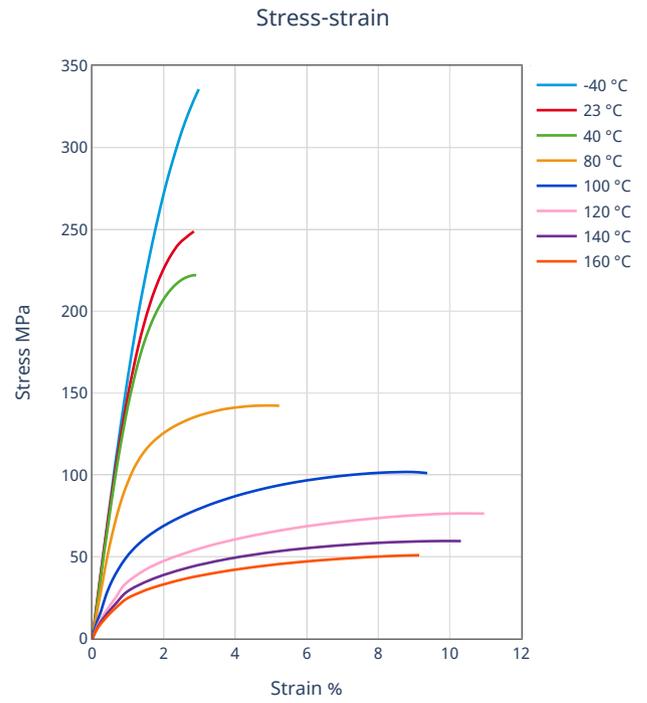
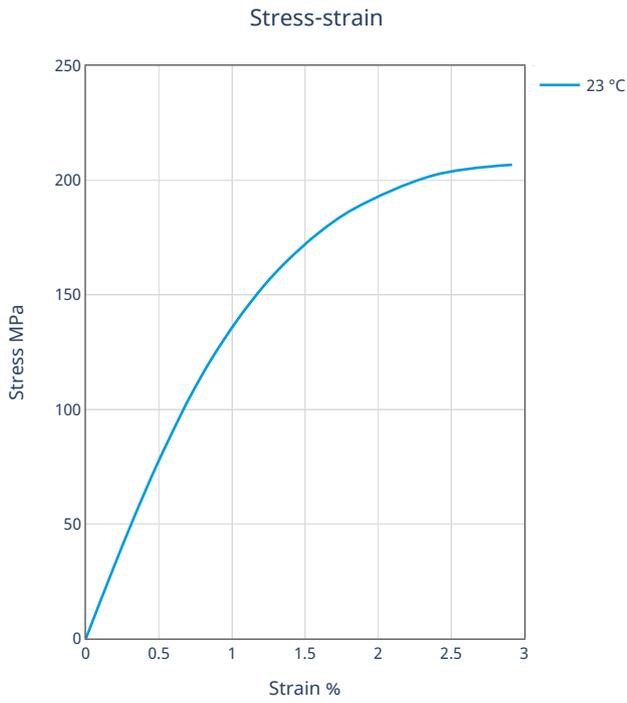
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Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	200	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	235	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	16	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	60	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	
Yellow card available	yes		
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3	mm	
Yellow card available	yes		
Electrical Properties	Value	Unit	Standard
Electric strength	27	kV/mm	IEC 60243-1
Other Properties	Value	Unit	Standard
Water absorption	3	%	Sim. to ISO 62
Humidity absorption	1.2	%	Sim. to ISO 62
Density	1570	kg/m ³	ISO 1183

Diagrams

EcoPaXX® Q-DWX10

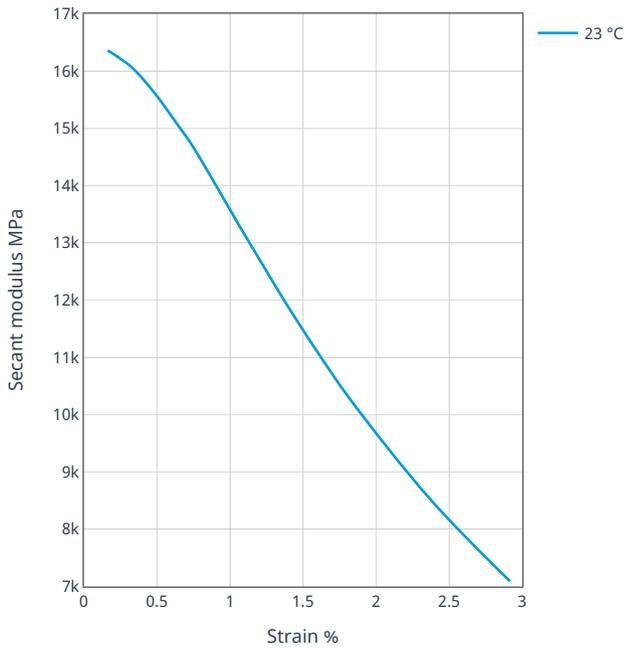
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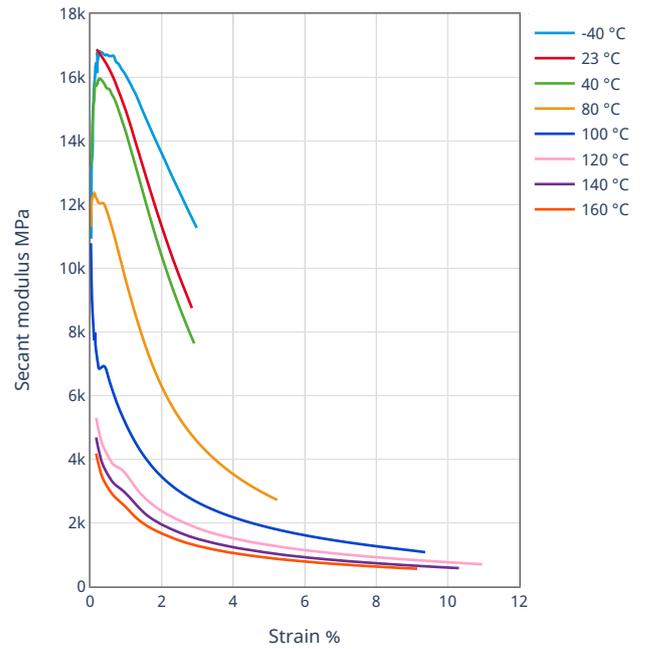
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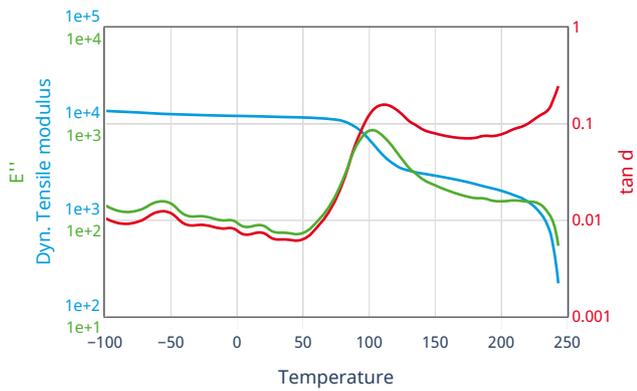
Secant modulus-strain



Secant modulus-strain



Dynamic tensile modulus-temperature



Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding