

TECHNICAL DATA SHEET

Arnite® AV2 390 XT

Envalior
PET-GF50

Processing

Injection molding

Delivery Form

Pellets

Additives

Release agent

Product Text

Product Information

50% Glass Reinforced, Applications with extremely narrow tolerances

ISO 1043 PET-GF50

Mechanical Properties	Value	Unit	Standard
Tensile modulus	18500	MPa	ISO 527
Stress at break	205	MPa	ISO 527
Strain at break	1.7	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	65	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	60	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	8.5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	8.5	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	255	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	232	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	250	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	13	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	48	E-6/K	ISO 11359-1/-2

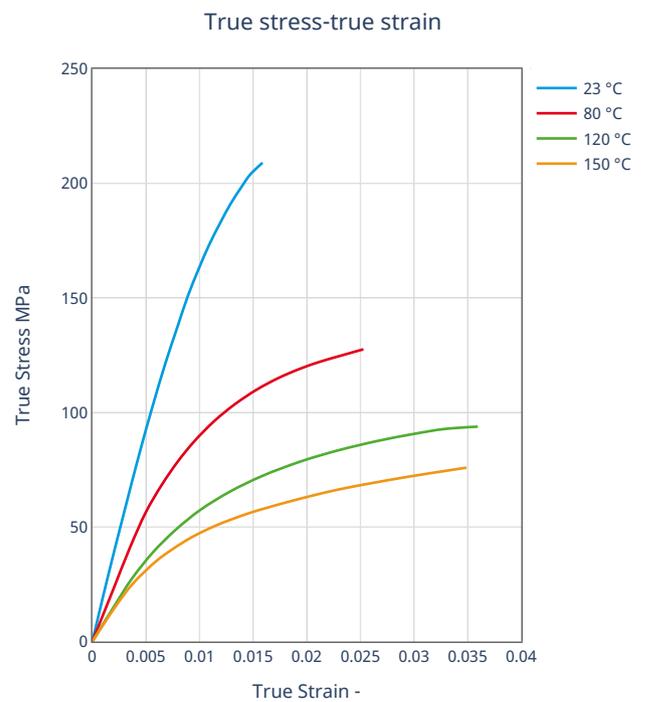
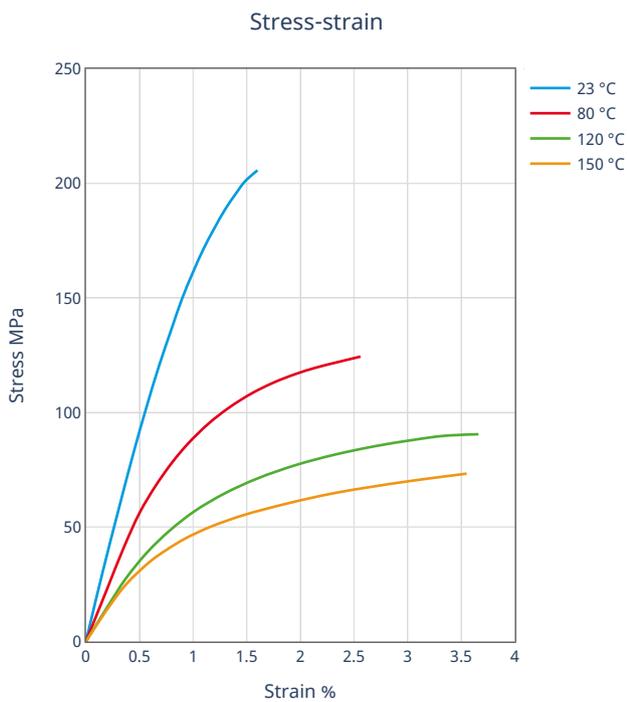
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.8		IEC 62631-2-1
Relative permittivity, 1MHz	3.5		IEC 62631-2-1

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Electrical Properties	Value	Unit	Standard
Dissipation factor, 100Hz	20	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	110	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Other Properties	Value	Unit	Standard
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.12	%	Sim. to ISO 62
Density	1805	kg/m ³	ISO 1183

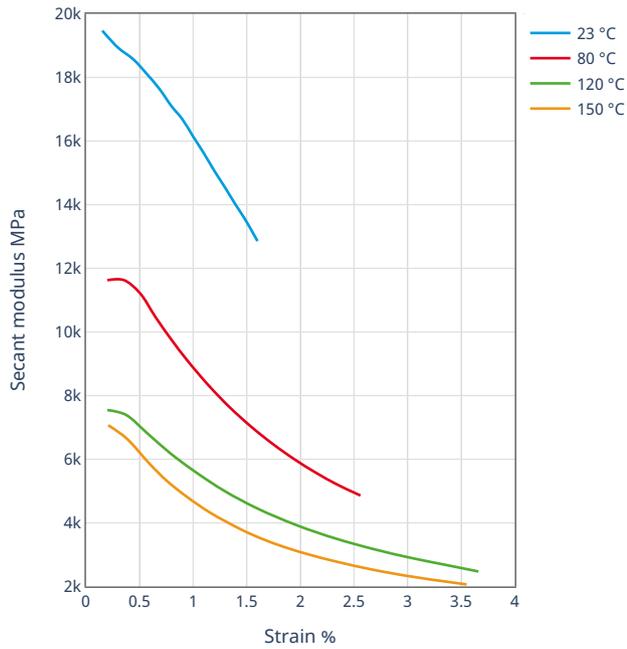
Diagrams



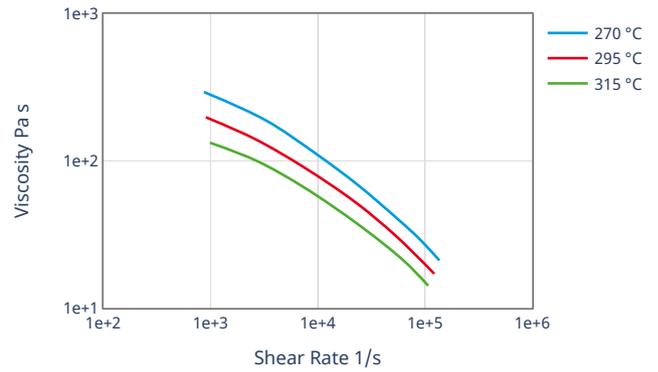
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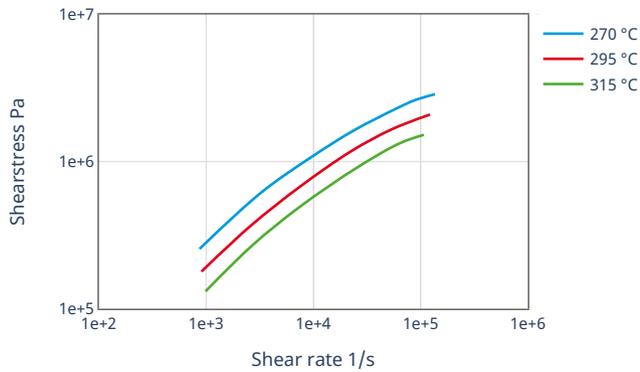
Secant modulus-strain



Viscosity-shear rate



Shearstress-shear rate



Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Supporting document for Stanyl quality processing