

TECHNICAL DATA SHEET

# Arnite® AV2 390 XL

Envalior  
PET-GF50

**Processing**

Injection molding

**Delivery Form**

Pellets

**Additives**

Release agent

## Product Text

**Product Information**

50% Glass Reinforced, Low Outgassing

ISO 1043 PET-GF50

Mechanical Properties	Value	Unit	Standard
Tensile modulus	18100	MPa	ISO 527
Stress at break	210	MPa	ISO 527
Strain at break	2	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	65	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	65	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	9	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	9	kJ/m <sup>2</sup>	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	235	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	252	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	20	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	35	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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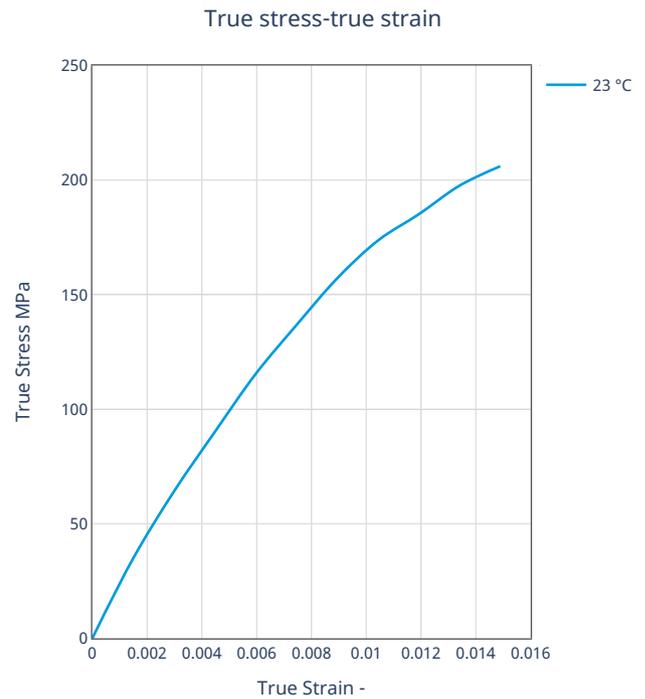
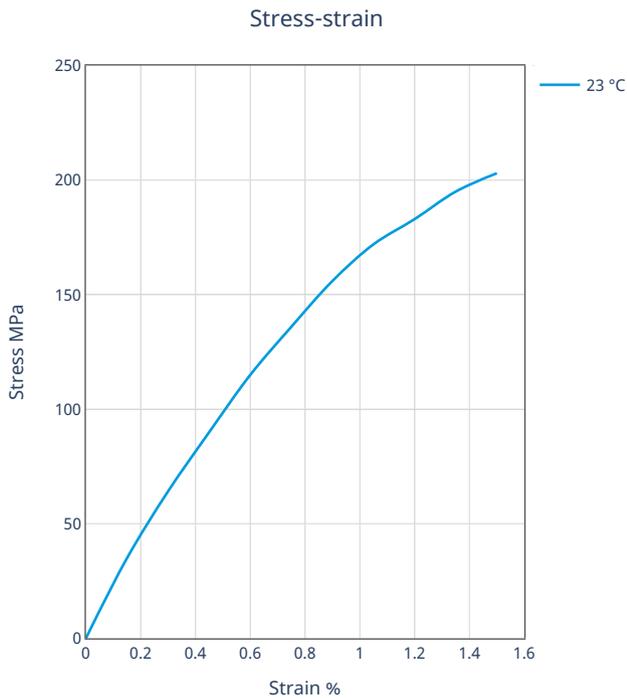
Envalior

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
Comparative tracking index	250		IEC 60112

Other Properties	Value	Unit	Standard
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.12	%	Sim. to ISO 62
Density	1780	kg/m <sup>3</sup>	ISO 1183

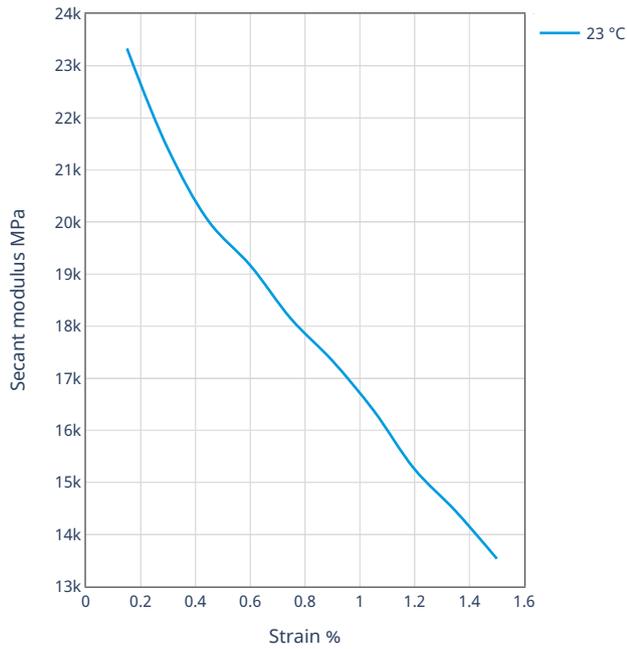
## Diagrams



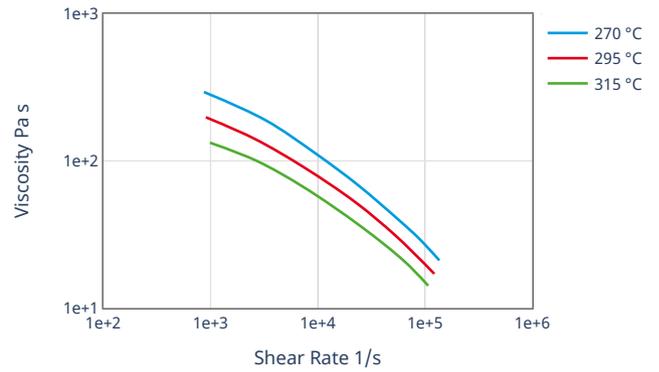
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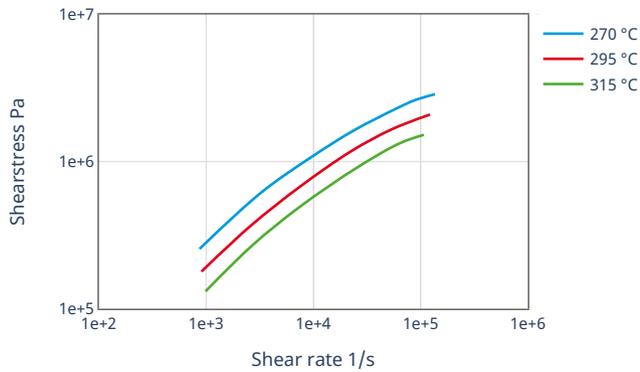
Secant modulus-strain



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