

TECHNICAL DATA SHEET

# Arnite® TV4 230

Envalior  
PBT-GF15

**Processing**

Injection molding

**Delivery Form**

Pellets

**Additives**

Release agent

## Product Text

**Product Information**

15% Glass Reinforced

ISO 1043 PBT-GF15

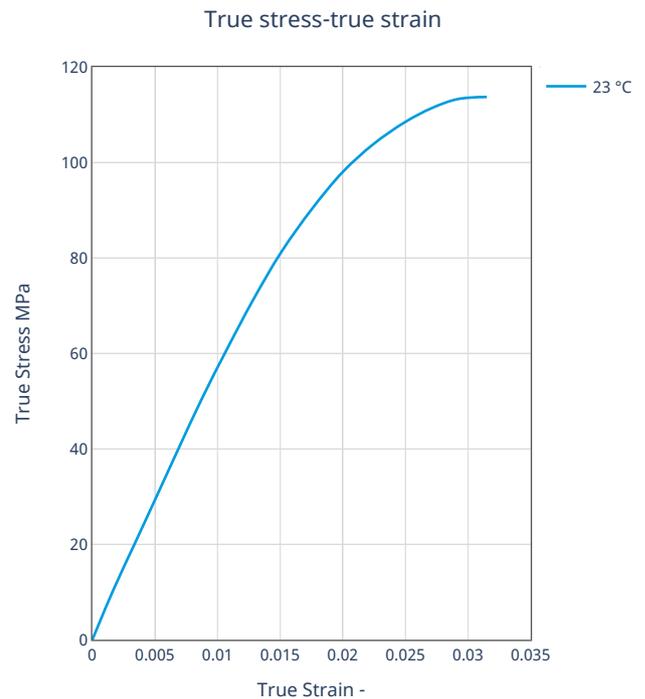
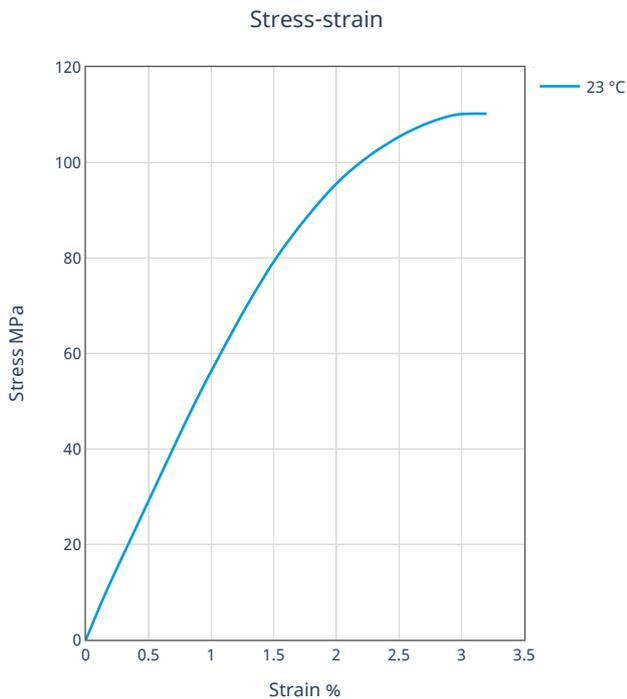
Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	27	cm <sup>3</sup> /10min	ISO 1133
Temperature	250	°C	
Load	2.16	kg	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	6000	MPa	ISO 527
Stress at break	115	MPa	ISO 527
Strain at break	3	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	34	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	32	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	6	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m <sup>2</sup>	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	195	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	220	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	50	E-6/K	ISO 11359-1/-2

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Thermal Properties	Value	Unit	Standard
Coeff. of linear therm. expansion, normal	80	E-6/K	ISO 11359-1/-2
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.6		IEC 62631-2-1
Relative permittivity, 1MHz	3.4		IEC 62631-2-1
Dissipation factor, 100Hz	20	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	180	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Comparative tracking index	400		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1410	kg/m <sup>3</sup>	ISO 1183

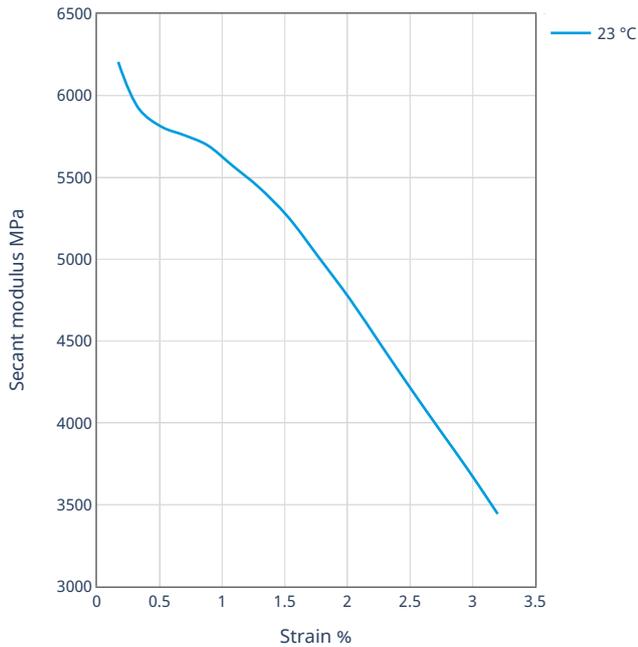
## Diagrams



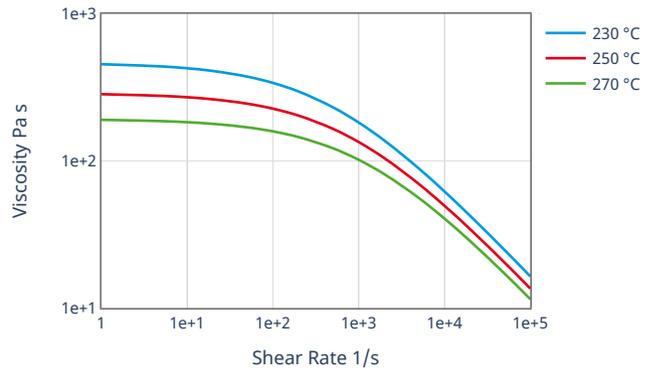
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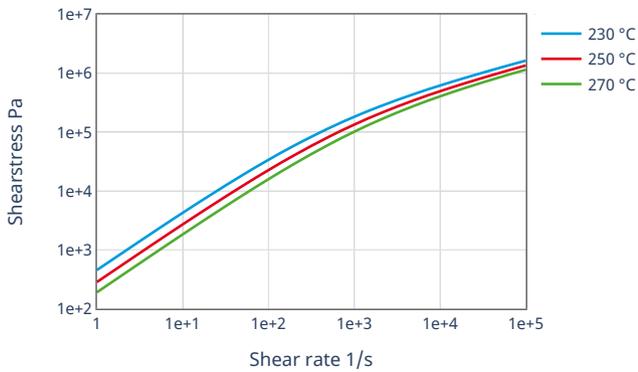
Secant modulus-strain



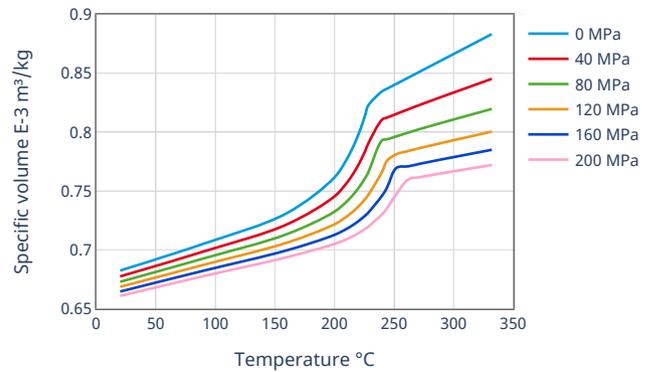
Viscosity-shear rate



Shearstress-shear rate



Spec. volume-Temperature (pVT)



## Processing Information

### Injection molding

#### Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Supporting document for Stanyl quality processing