

TECHNICAL DATA SHEET

# Arnite® AV2 370 /B

Envalior  
PET-GF35

**Processing**

Injection molding

**Delivery Form**

Pellets

**Additives**

Release agent

## Product Text

**Product Information**

35% Glass Reinforced, Brake Booster Body Valves

ISO 1043 PET-GF35

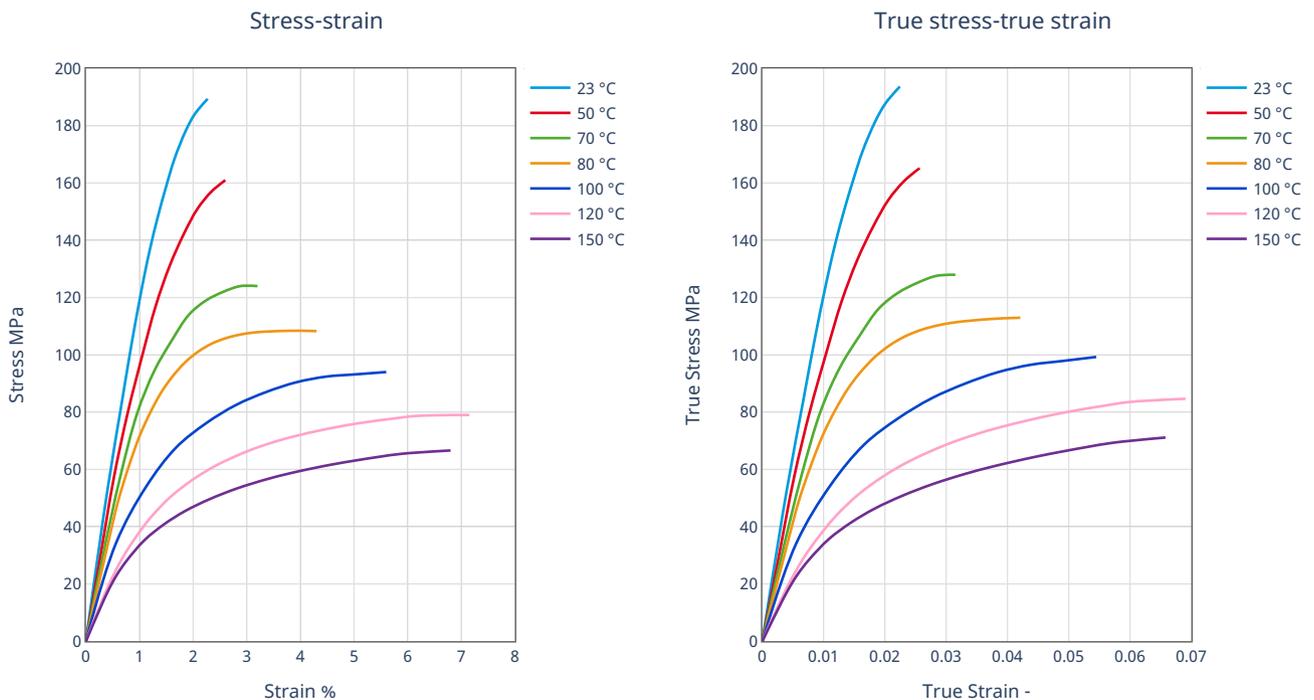
Processing/Physical Characteristics	Value	Unit	Standard
Density of melt	1350	kg/m <sup>3</sup>	
Thermal conductivity of melt	0.195	W/(m K)	
Spec. heat capacity of melt	1670	J/(kg K)	
Eff. thermal diffusivity	8.67E-8	m <sup>2</sup> /s	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	12600	MPa	ISO 527
Stress at break	185	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	70	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	50	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	9.5	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	9.5	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	250	°C	ISO 75-1/-2

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Thermal Properties	Value	Unit	Standard
Coeff. of linear therm. expansion, parallel	25	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	40	E-6/K	ISO 11359-1/-2
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.7		IEC 62631-2-1
Relative permittivity, 1MHz	3.5		IEC 62631-2-1
Dissipation factor, 100Hz	30	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	130	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	33	kV/mm	IEC 60243-1
Comparative tracking index	250		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	0.45	%	Sim. to ISO 62
Humidity absorption	0.18	%	Sim. to ISO 62
Density	1630	kg/m <sup>3</sup>	ISO 1183

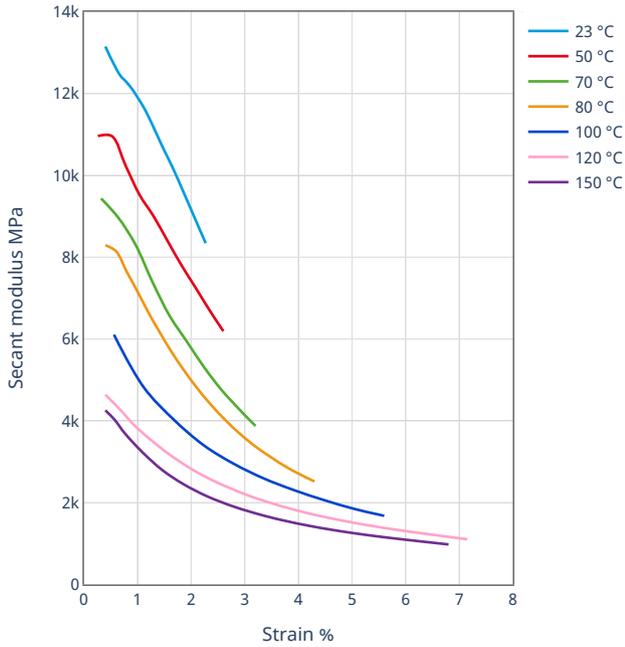
## Diagrams



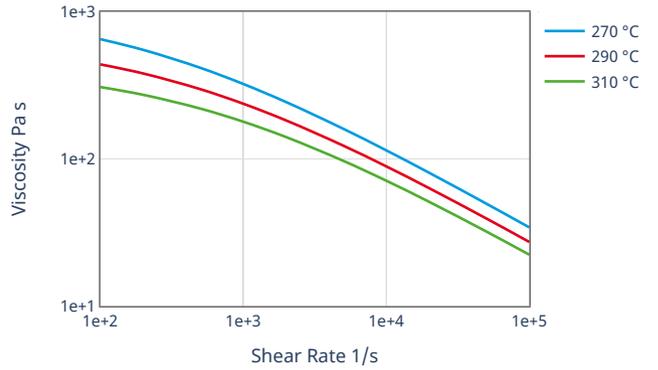
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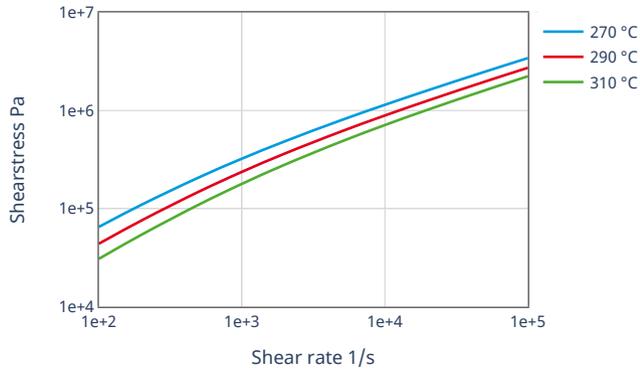
### Secant modulus-strain



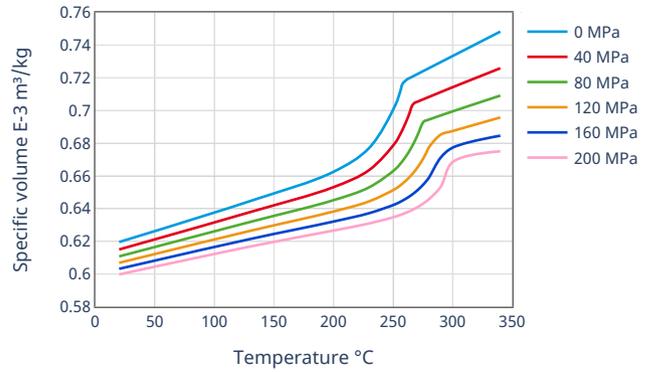
### Viscosity-shear rate



### Shearstress-shear rate



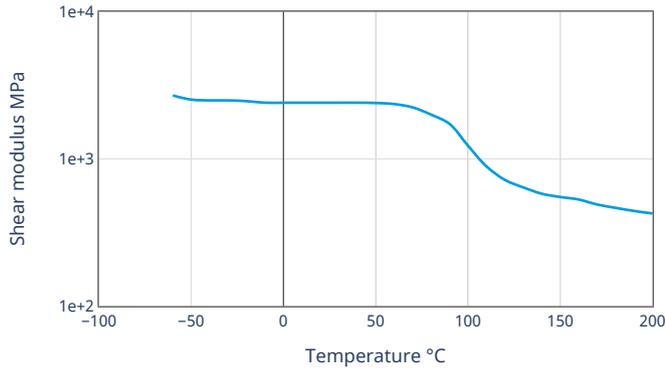
### Spec. volume-Temperature (pVT)



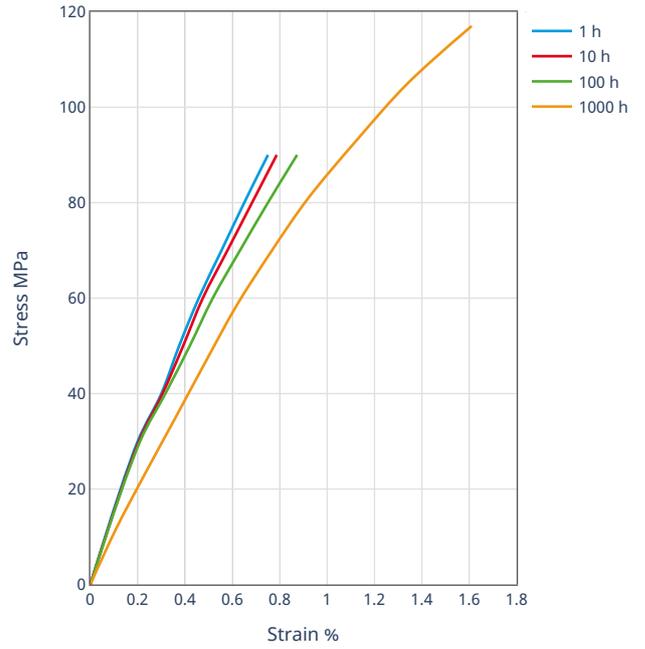
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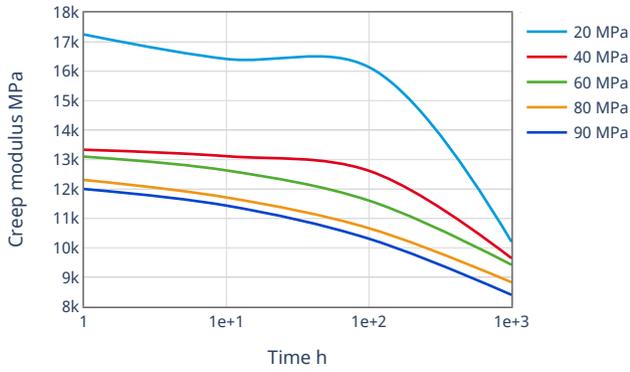
### Dynamic shear modulus-temperature



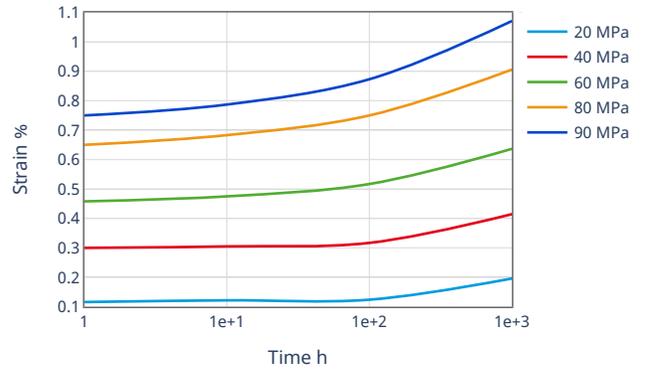
### Stress-strain (isochronous) 23°C



### Creep modulus-time 23°C



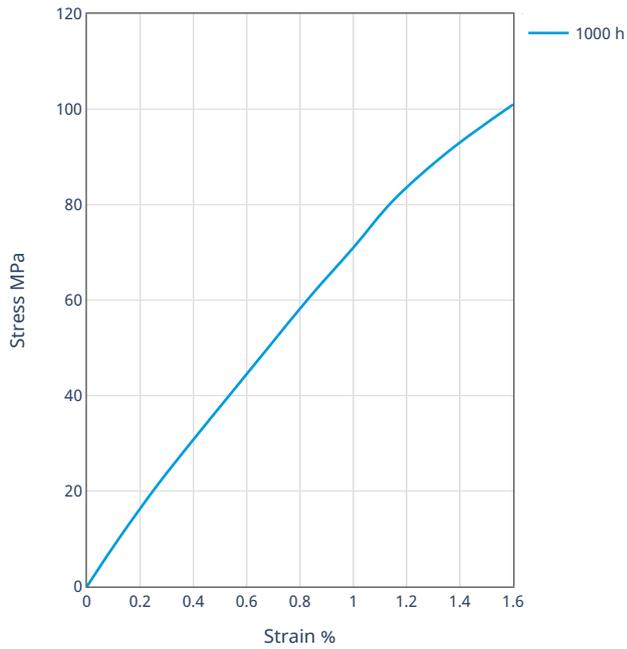
### Creep curve 23°C



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Stress-strain (isochronous) 40°C



## Processing Information

### Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Supporting document for Stanyl quality processing