

**TECHNICAL DATA SHEET**

# Akulon® Ultraflow K-FG5

Envalior  
PA6-GF25

**Processing**

Injection molding

**Delivery Form**

Pellets

**Product Text**
**Product Information**

25% Glass Reinforced, High Flow

ISO 1043 PA6-GF25

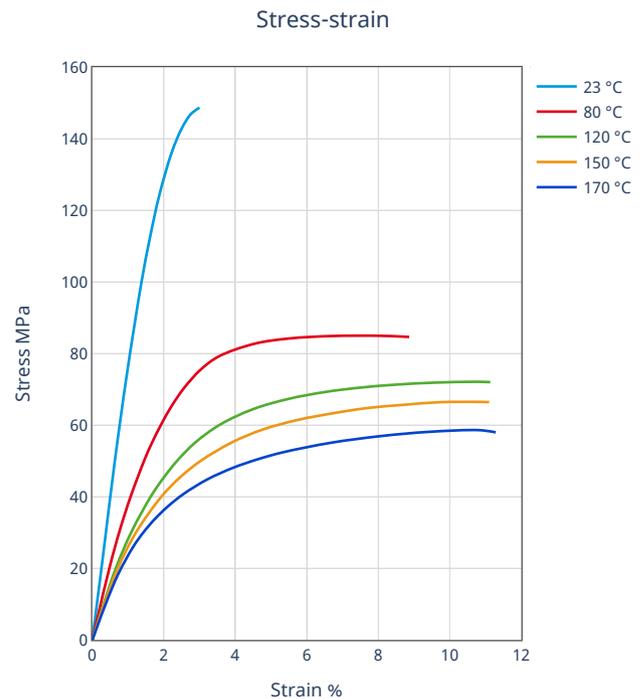
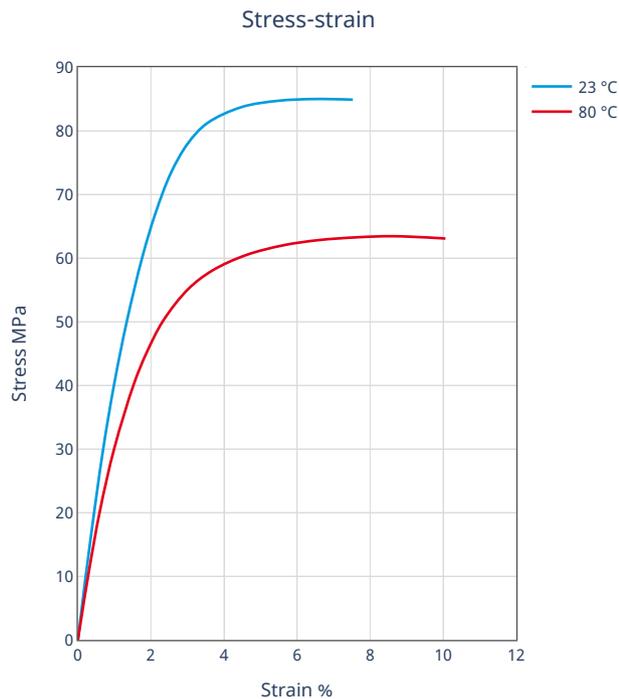
Processing/Physical Characteristics	Value	Unit	Standard
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1	%	ISO 294-4, 2577
Density of melt	1130	kg/m <sup>3</sup>	
Thermal conductivity of melt	0.26	W/(m K)	
Spec. heat capacity of melt	2260	J/(kg K)	
Eff. thermal diffusivity	1.02E-7	m <sup>2</sup> /s	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	8150	MPa	ISO 527
Stress at break	150	MPa	ISO 527
Strain at break	3.3	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	80	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	40	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	10	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	8	kJ/m <sup>2</sup>	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	195	°C	ISO 75-1/-2

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Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 0.45 MPa	215	°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	70	E-6/K	ISO 11359-1/-2
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.5		IEC 62631-2-1
Relative permittivity, 1MHz	3.3		IEC 62631-2-1
Dissipation factor, 100Hz	50	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	150	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E14	Ohm	IEC 62631-3-2
Comparative tracking index	600		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	6.8	%	Sim. to ISO 62
Humidity absorption	1.8	%	Sim. to ISO 62
Density	1300	kg/m <sup>3</sup>	ISO 1183

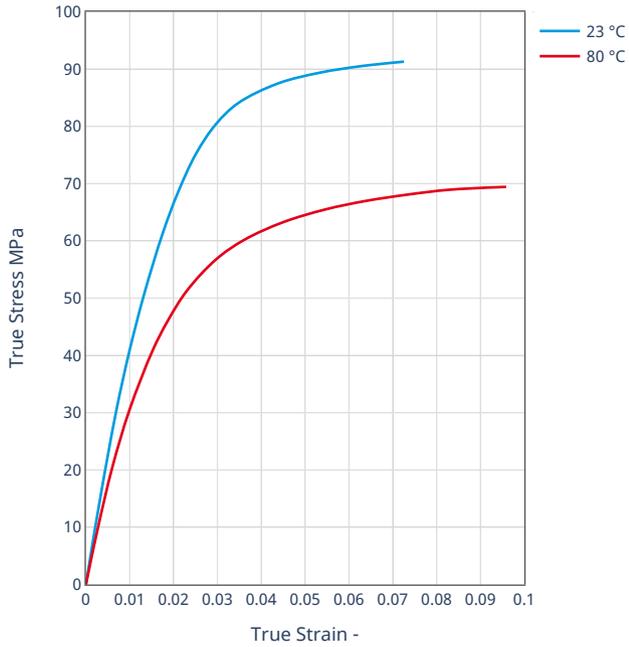
## Diagrams



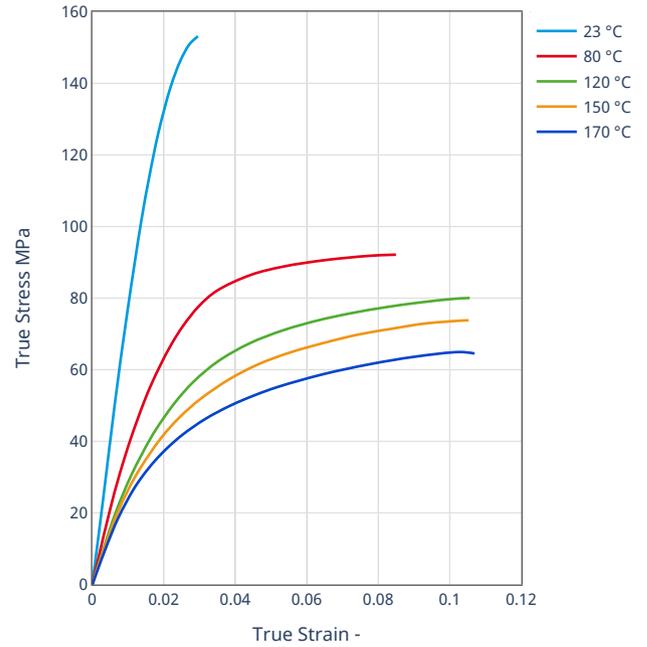
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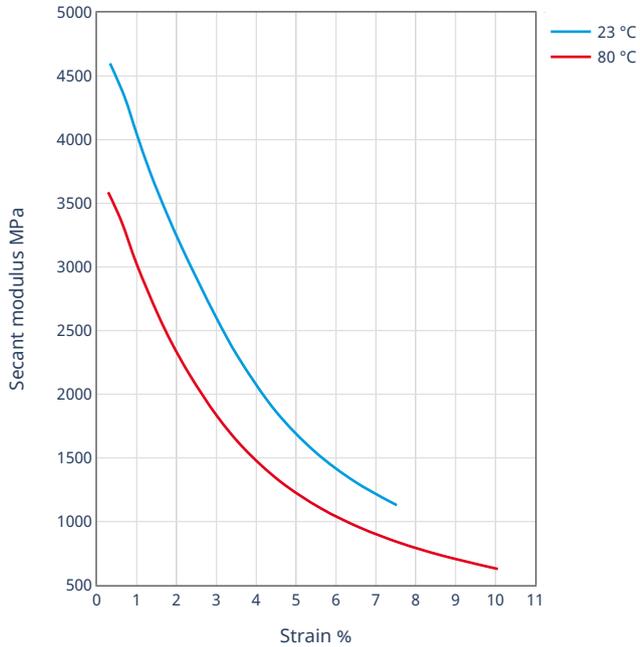
True stress-true strain



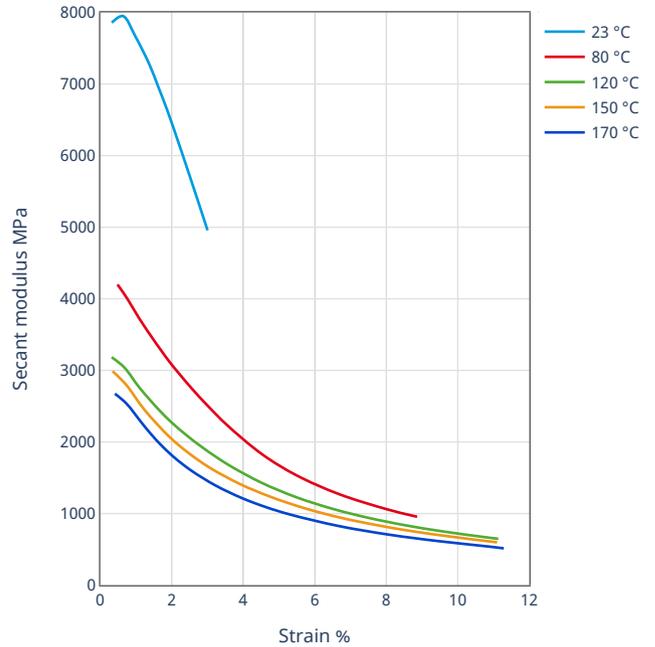
True stress-true strain



Secant modulus-strain



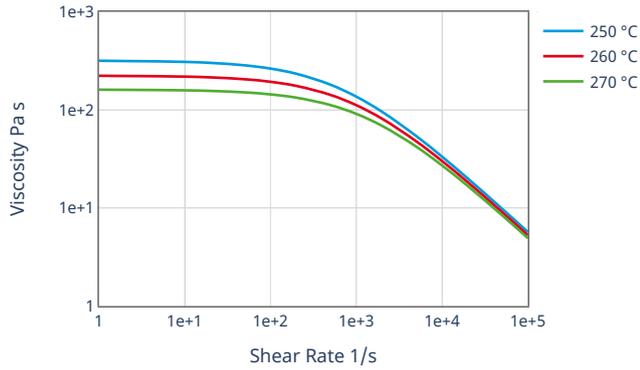
Secant modulus-strain



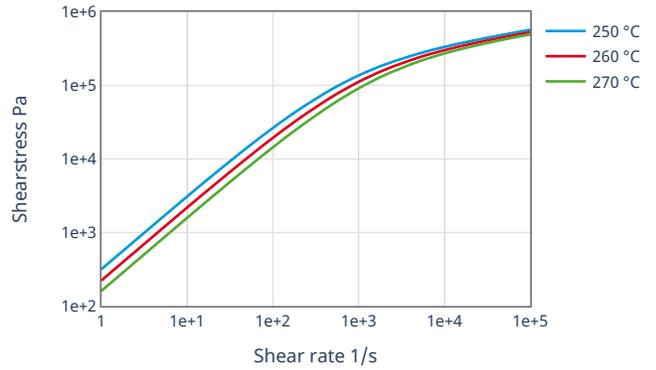
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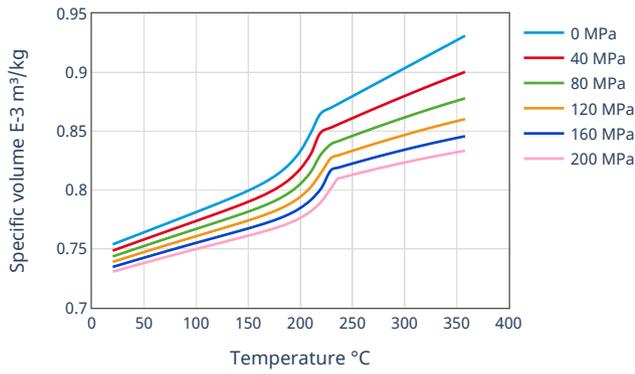
Viscosity-shear rate



Shearstress-shear rate



Spec. volume-Temperature (pVT)



## Processing Information

Injection molding

Injection Molding Recommendations