

TECHNICAL DATA SHEET

# Akulon® Ultraflow K-FHGR24

Envalior  
PA6-(GF+GB)30

**Processing**

Injection molding

**Delivery Form**

Pellets

**Additives**

Release agent

**Special Characteristics**

Heat stabilized or stable to heat

## Product Text

**Product Information**

10% Glass Reinforced, 20% Glass Beads Reinforced, Heat Stabilized, High Flow

ISO 1043 PA6-(GF+GB)30

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	18	cm <sup>3</sup> /10min	ISO 1133
Temperature	250	°C	
Load	2.16	kg	
Density of melt	1160	kg/m <sup>3</sup>	
Thermal conductivity of melt	0.29	W/(m K)	
Spec. heat capacity of melt	2230	J/(kg K)	
Eff. thermal diffusivity	1.43E-7	m <sup>2</sup> /s	

Mechanical Properties	Value	Unit	Standard
Tensile modulus	6000	MPa	ISO 527
Stress at break	85	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	21	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	21	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	4	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	4	kJ/m <sup>2</sup>	ISO 179/1eA

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Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	190	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	215	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	35	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	1E12	Ohm*m	IEC 62631-3-1
Surface resistivity	1E13	Ohm	IEC 62631-3-2
Electric strength	35	kV/mm	IEC 60243-1
Comparative tracking index	350		IEC 60112

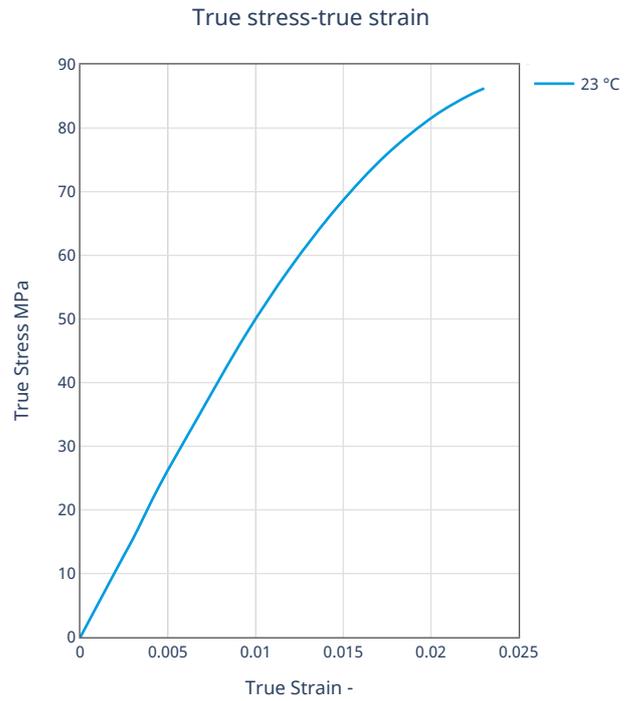
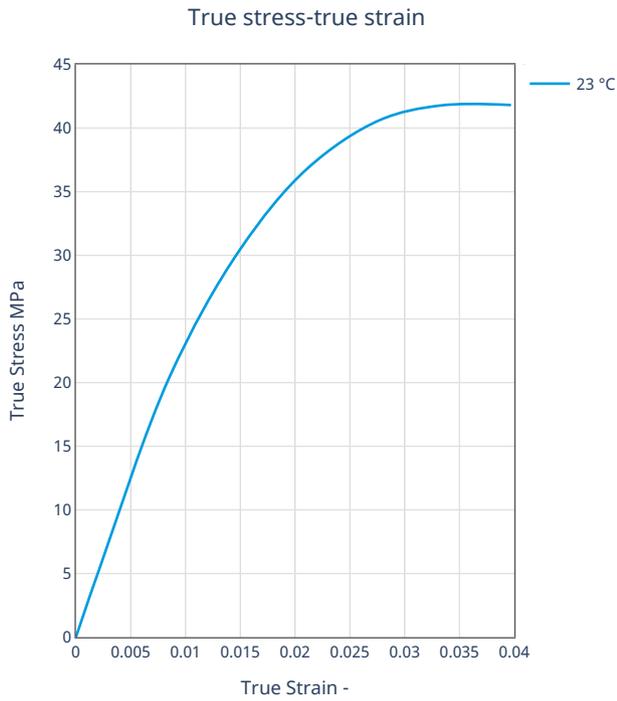
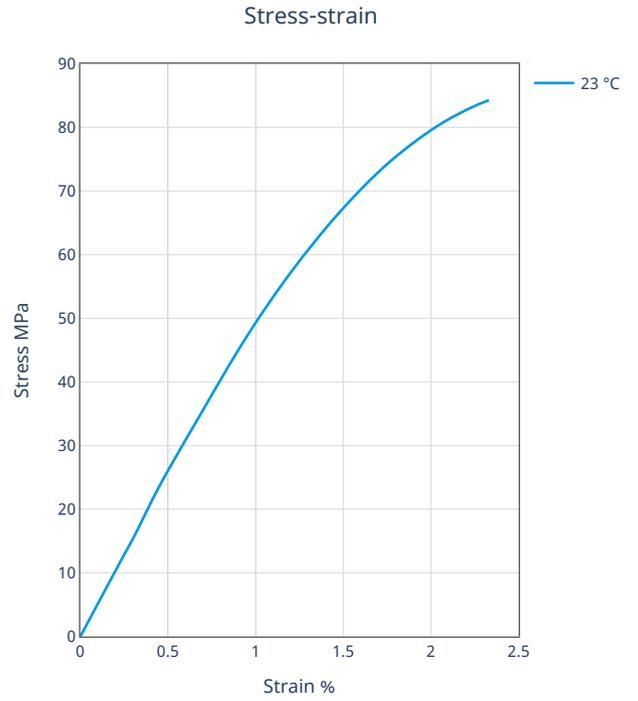
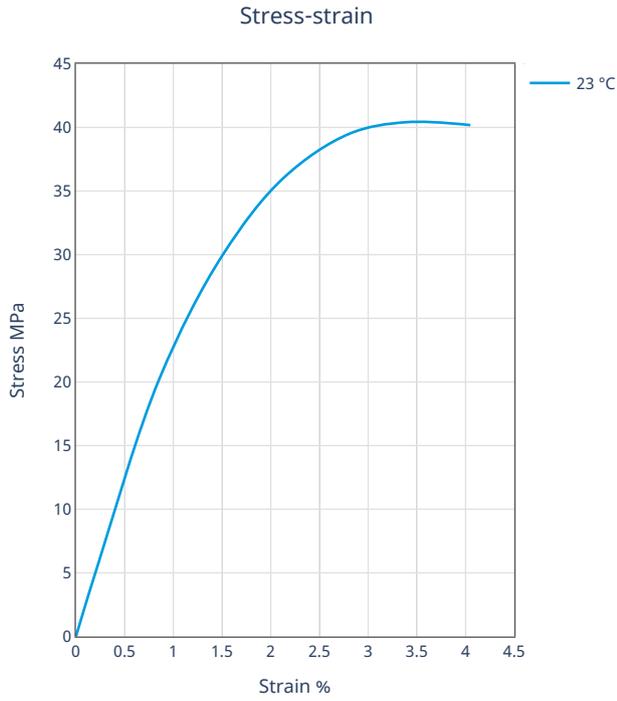
  

Other Properties	Value	Unit	Standard
Water absorption	6.5	%	Sim. to ISO 62
Humidity absorption	1.9	%	Sim. to ISO 62
Density	1350	kg/m <sup>3</sup>	ISO 1183

## Diagrams

# Akulon® Ultraflow K-FHGR24

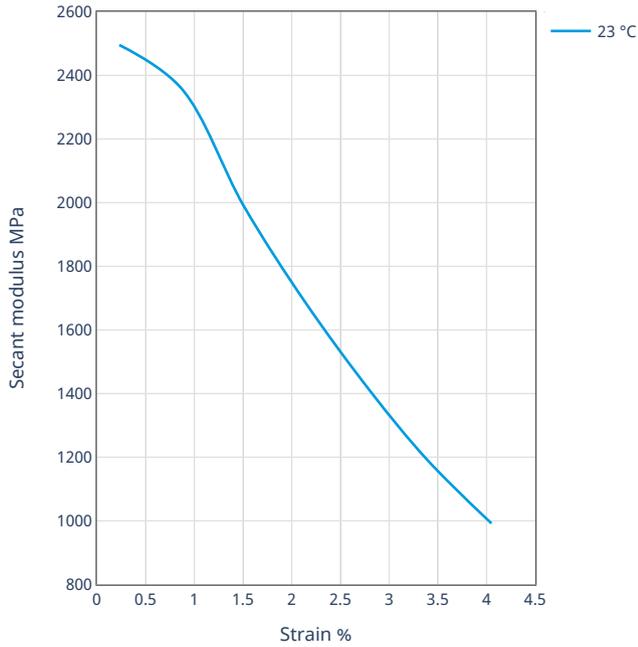
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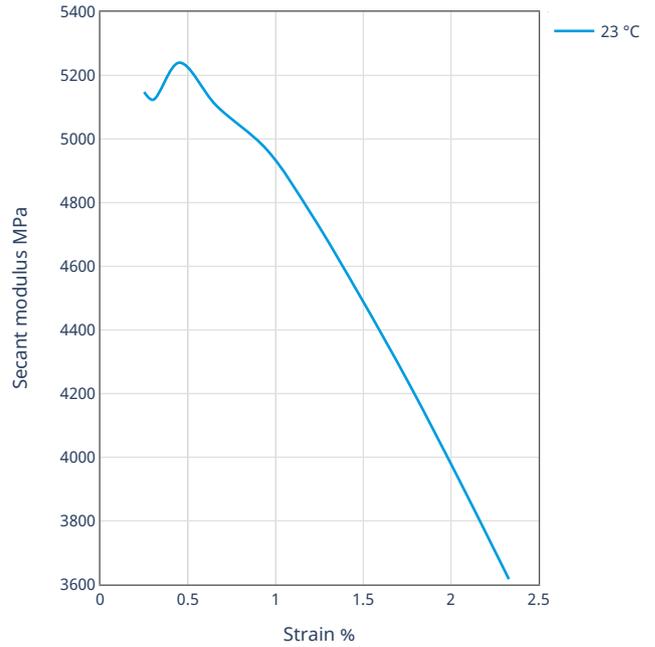
# Akulon® Ultraflow K-FHGR24

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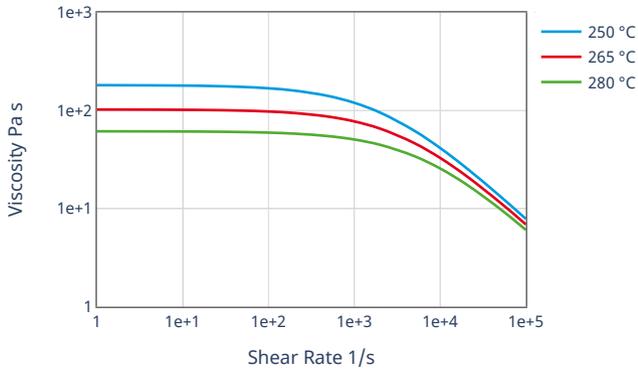
Secant modulus-strain



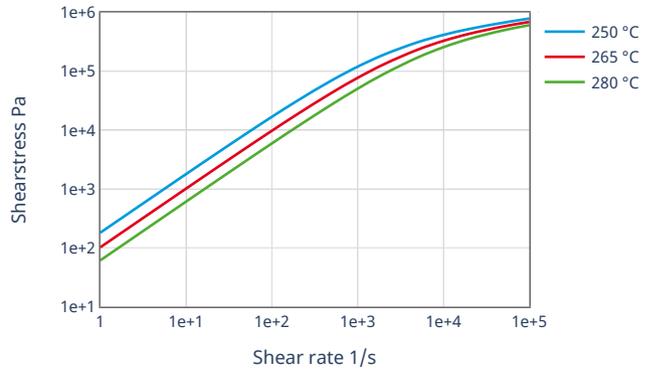
Secant modulus-strain



Viscosity-shear rate

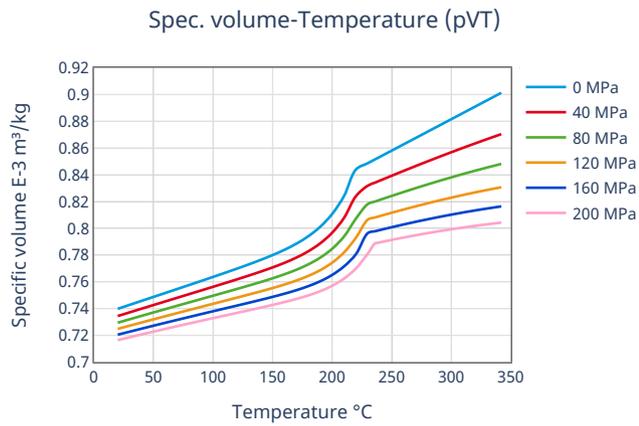


Shearstress-shear rate



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## Processing Information

Injection molding

Injection Molding Recommendations