



<b>Akulon® K224-G3</b>			
PA6-GF15			Envalior
<b>Product Texts</b>			
15% Glass Reinforced			
ISO 1043 PA6-GF15			
<b>Rheological properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
Tensile Modulus	6000 / 3500	MPa	ISO 527
Stress at break	125 / 70	MPa	ISO 527
Strain at break	3 / 12	%	ISO 527
Charpy impact strength, +23°C	45 / 80	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	40 / 40	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	7 / 15	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	6 / 6	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
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
Temp. of deflection under load, 0.45 MPa	215 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	30 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	80 / *	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3.0 / *	mm	-
Yellow Card available	yes / *	-	-
<b>Electrical properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
Relative permittivity, 100Hz	3.5 / 14	-	IEC 62631-2-1
Relative permittivity, 1MHz	4.7 / 4.5	-	IEC 62631-2-1
Dissipation factor, 100Hz	55 / 1500	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	180 / 1200	E-4	IEC 62631-2-1
Volume resistivity	1E13 / 1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
Electric strength	35 / 25	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112
<b>Other properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
Water absorption	7.6 / *	%	Sim. to ISO 62
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1230 / -	kg/m <sup>3</sup>	ISO 1183
<b>Rheological calculation properties</b>		<b>Value</b>	<b>Unit</b>
<b>ISO Data</b>			

**Akulon® K224-G3**

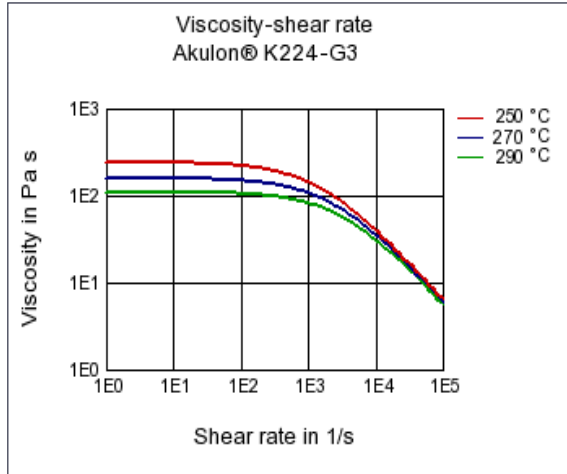
PA6-GF15

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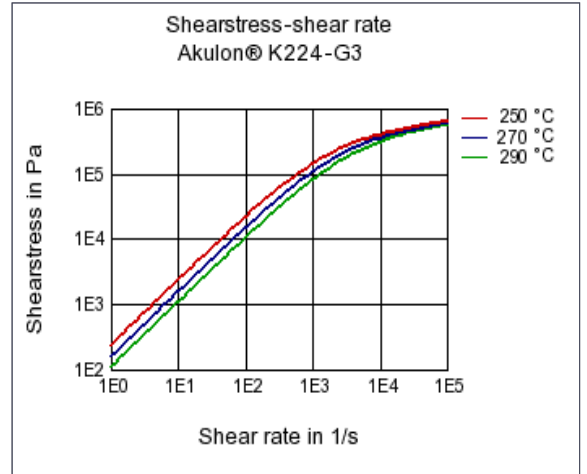
Density of melt	1030	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.26	W/(m K)	-
Spec. heat capacity of melt	2400	J/(kg K)	-
Eff. thermal diffusivity	1.03E-7	m <sup>2</sup> /s	-

**Diagrams**

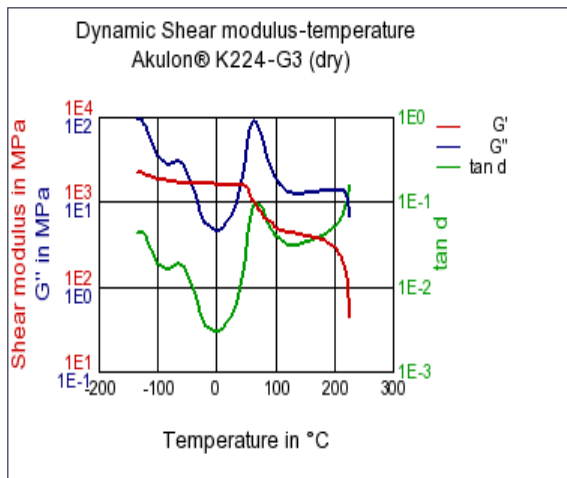
**Viscosity-shear rate**



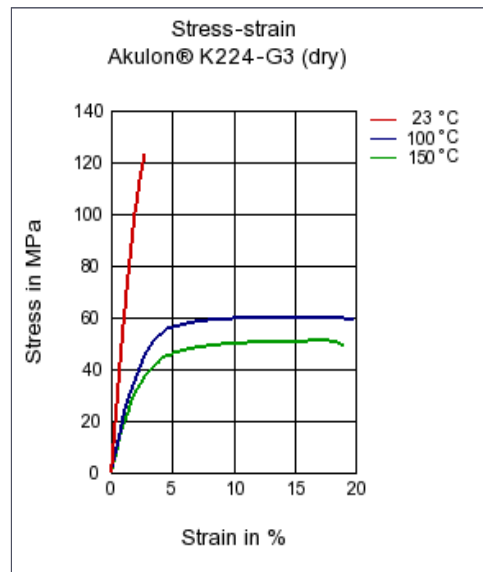
**Shearstress-shear rate**



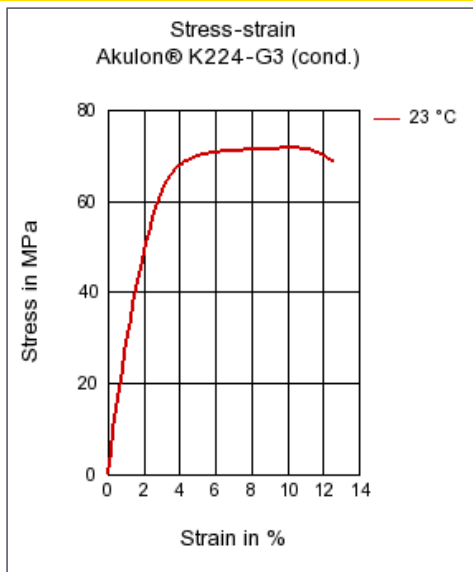
**Dynamic Shear modulus-temperature**



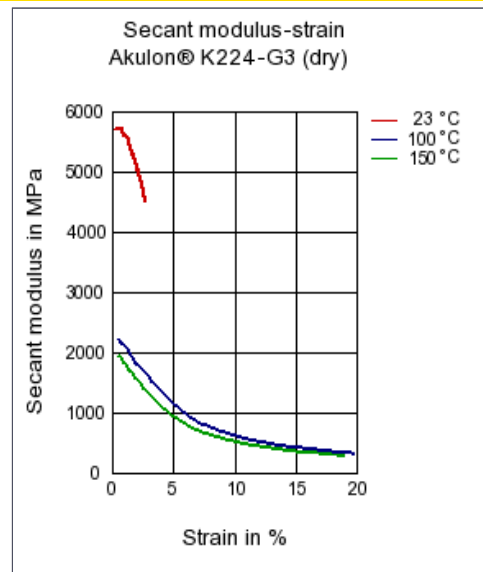
**Stress-strain**



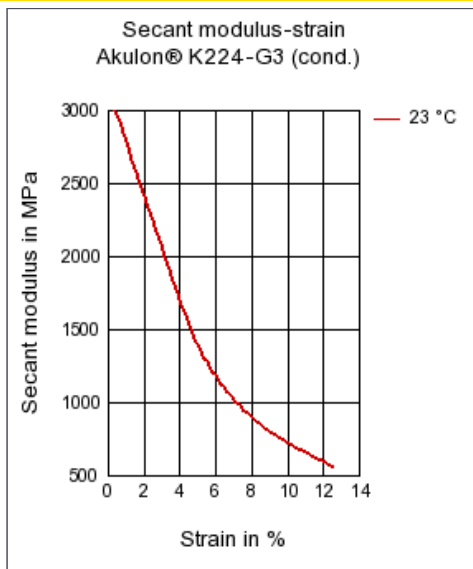
## Stress-strain



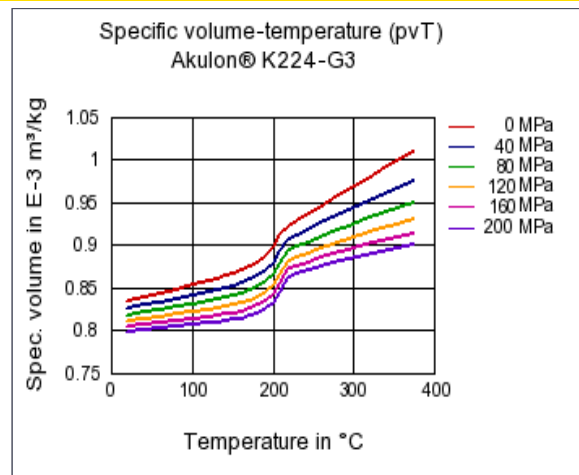
## Secant modulus-strain



## Secant modulus-strain



## Specific volume-temperature (pvT)



## Characteristics

## Processing

Injection Molding

## Additives

Release agent

## Delivery form

Pellets

## Other text information

## Injection Molding

[Injection Molding Recommendations](#)[Steel recommendations for molds screws and barrels](#)[Trouble shooting guideline for injection molding](#)

## Chemical Media Resistance

## Alcohols

☺ Methanol (23 °C)

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**Hydrocarbons**

☹️ Toluene (23°C)

**Ketones**

☹️ Acetone (23°C)

**Ethers**

☹️ Diethyl ether (23°C)

**Other**

☹️ Ethyl Acetate (23°C)

☹️ Water (23°C)