


**Akulon® K224-PG8**

PA6-I-GF40

DSM Engineering Plastics

**Product Texts**

40% Glass Reinforced, Impact Modified

ISO 1043 PA6-I-GF40

[Akulon website](#)

Rheological properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	14 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	ISO 1133
Load	5 / *	kg	ISO 1133
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	11500 / 7000	MPa	ISO 527-1/-2
Stress at break	170 / 115	MPa	ISO 527-1/-2
Strain at break	4.5 / 7	%	ISO 527-1/-2
Charpy impact strength (+23°C)	105 / 110	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	110 / 110	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	25 / 35	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	16 / 16	kJ/m²	ISO 179/1eA
<b>Thermal properties</b>			
<b>ISO Data</b>			
Temp. of deflection under load (1.80 MPa)	200 / *	°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	20 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	65 / *	E-6/K	ISO 11359-1/-2
<b>Electrical properties</b>			
<b>ISO Data</b>			
Relative permittivity, 100Hz	3.5 / 14	-	IEC 60250
Relative permittivity, 1MHz	3.3 / 4.5	-	IEC 60250
Dissipation factor, 100Hz	90 / 3000	E-4	IEC 60250
Dissipation factor, 1MHz	150 / 1200	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	25 / 20	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112
<b>Other properties</b>			
<b>ISO Data</b>			
Water absorption	4.9 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1430 / -	kg/m³	ISO 1183
<b>Rheological calculation properties</b>			
<b>ISO Data</b>			
Density of melt	1280	kg/m³	-
Thermal conductivity of melt	0.3	W/(m K)	-
Spec. heat capacity of melt	2010	J/(kg K)	-

Eff. thermal diffusivity

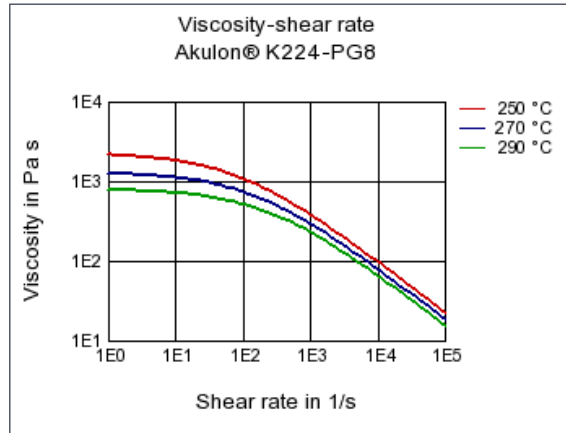
1.15E-7

m²/s

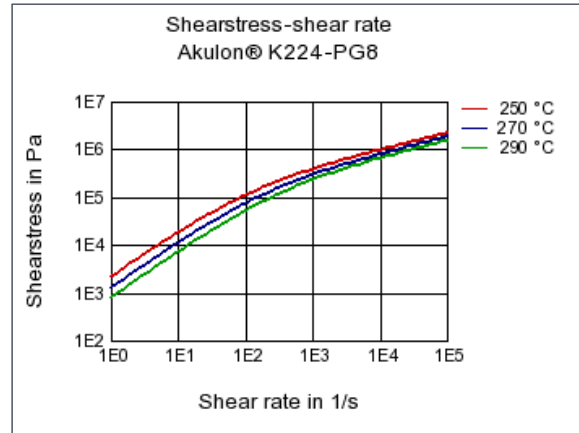
-

## Diagrams

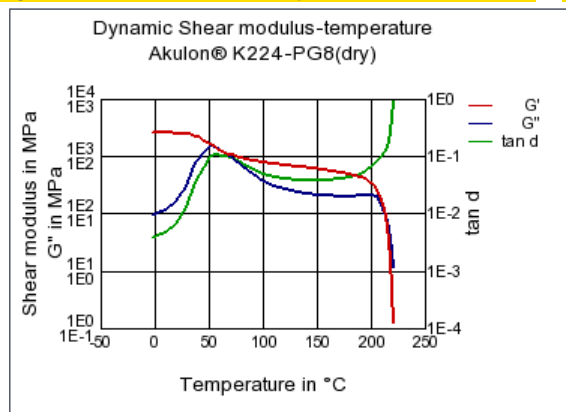
## Viscosity-shear rate



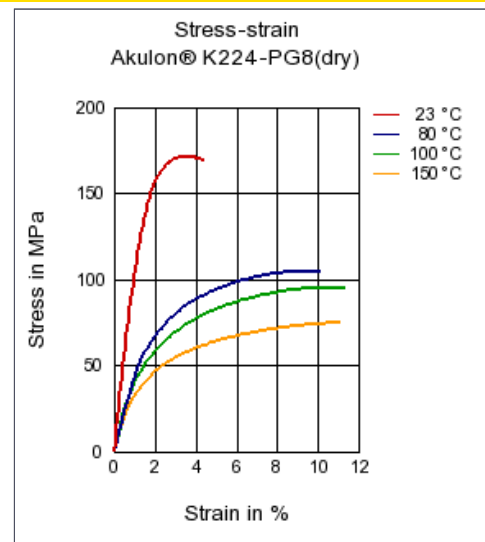
## Shearstress-shear rate



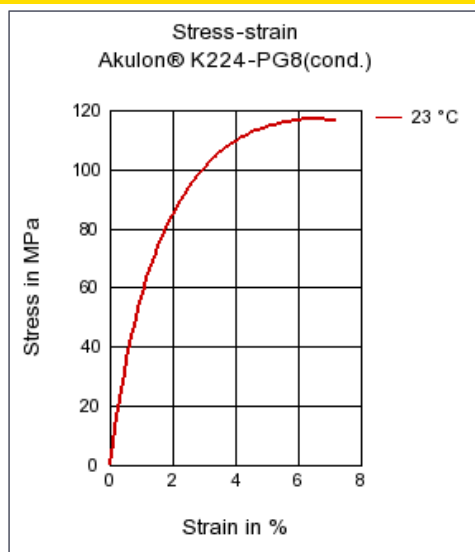
## Dynamic Shear modulus-temperature



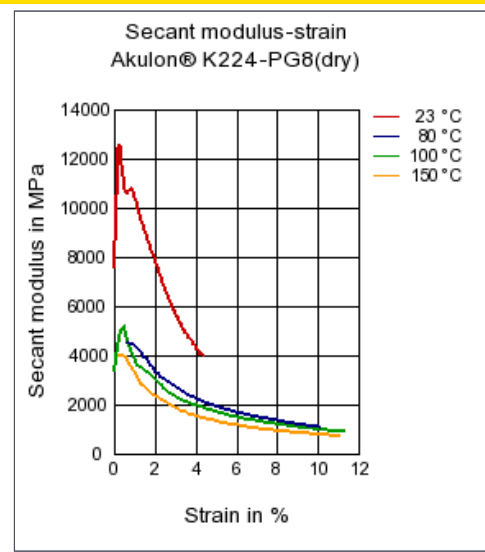
## Stress-strain



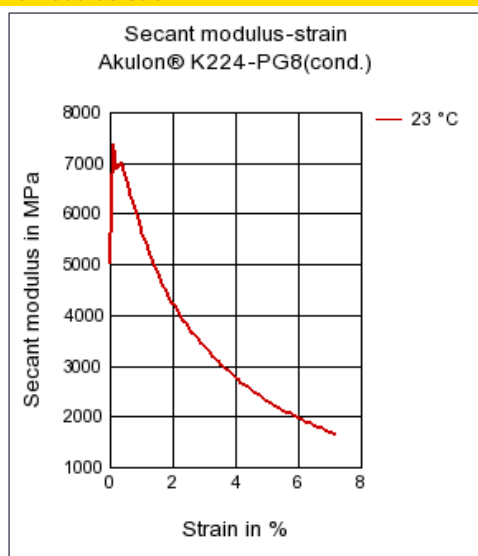
## Stress-strain



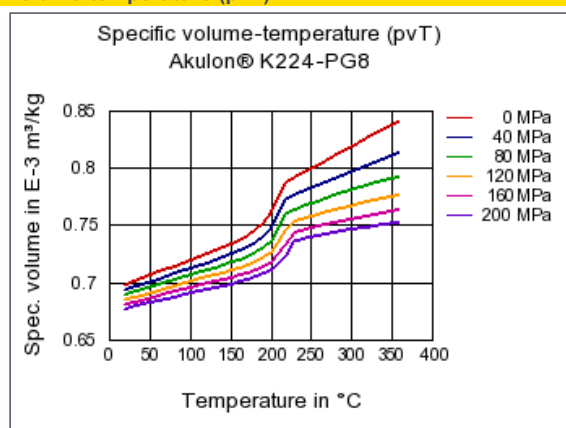
## Secant modulus-strain



## Secant modulus-strain



## Specific volume-temperature (pvT)



## Characteristics

## Processing

Injection Molding

## Additives

Release agent

## Delivery form

Pellets

## Special Characteristics

High impact or impact modified

## Other text information

## Injection Molding

[Injection Molding Recommendations](#)