

**Akulon® K224-G6**

PA6-GF30

DSM Engineering Plastics

**Product Texts**

30% Glass Reinforced

ISO 1043 PA6-GF30

[Akulon website](#)

<b>Rheological properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	6.4 / *	cm <sup>3</sup> /10min	ISO 1133
Temperature	240 / *	°C	ISO 1133
Load	2.16 / *	kg	ISO 1133
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
	Tensile Modulus	9500 / 6000	MPa
	Stress at break	180 / 110	MPa
	Strain at break	3.5 / 7	%
	Charpy impact strength (+23°C)	90 / 110	kJ/m <sup>2</sup>
	Charpy impact strength, -30°C	75 / 75	kJ/m <sup>2</sup>
	Charpy notched impact strength (+23°C)	12 / 25	kJ/m <sup>2</sup>
	Charpy notched impact strength, -30°C	11 / 11	kJ/m <sup>2</sup>
	Shore D hardness, 15s	85 / -	-
			ISO 868
<b>Thermal properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
	Melting temperature (10°C/min)	220 / *	°C
	Temp. of deflection under load (1.80 MPa)	200 / *	°C
	Temp. of deflection under load (0.45 MPa)	220 / *	°C
	Coeff. of linear therm. expansion, parallel	20 / *	E-6/K
	Coeff. of linear therm. expansion, normal	70 / *	E-6/K
	Burning behav. at 1.5 mm nom. thickn.	HB / *	class
	Thickness tested	1.5 / *	mm
	UL recognition	UL / *	-
	Burning behav. at thickness h	HB / *	class
	Thickness tested	0.8 / *	mm
	UL recognition	UL / *	-
			-
<b>Electrical properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
	Relative permittivity, 100Hz	3.5 / 20	-
	Relative permittivity, 1MHz	3.3 / 5	-
	Dissipation factor, 100Hz	50 / 3000	E-4
	Dissipation factor, 1MHz	150 / 1200	E-4
	Volume resistivity	1E13 / 1E11	Ohm*m
	Surface resistivity	* / 1E14	Ohm
	Electric strength	30 / 25	kV/mm
	Comparative tracking index	- / 600	-
			IEC 60112
<b>Other properties</b>			
<b>ISO Data</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>

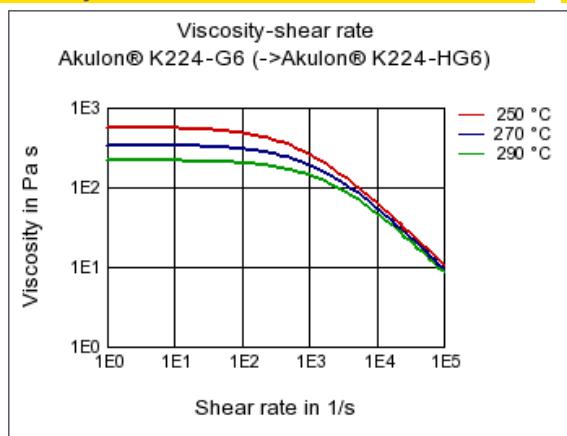
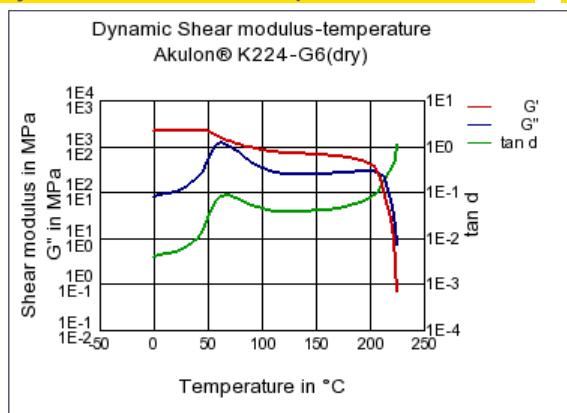
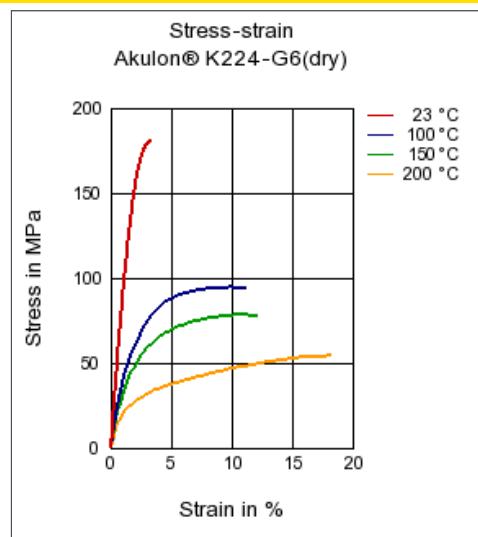
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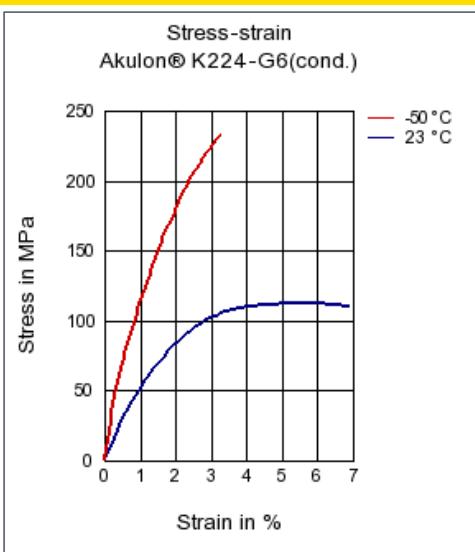
DSM Engineering Plastics

Water absorption	6.3 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1350 / -	kg/m <sup>3</sup>	ISO 1183

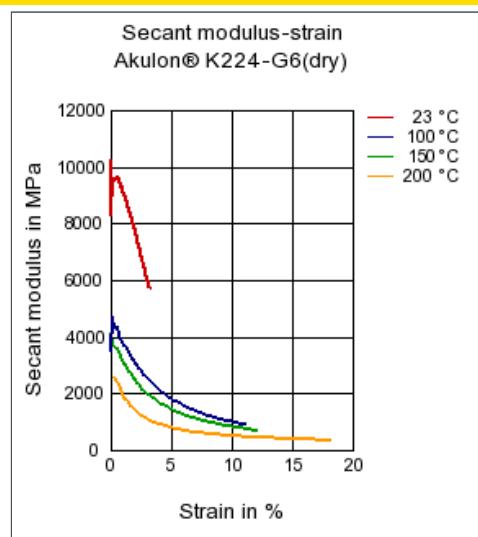
Rheological calculation properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density of melt	1150	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.27	W/(m K)	-
Spec. heat capacity of melt	2110	J/(kg K)	-
Eff. thermal diffusivity	1.12E-7	m <sup>2</sup> /s	-

**Diagrams****Viscosity-shear rate****Shearstress-shear rate****Dynamic Shear modulus-temperature****Stress-strain**

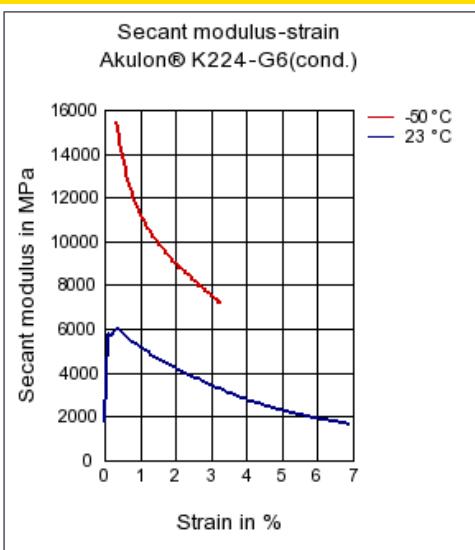
## Stress-strain



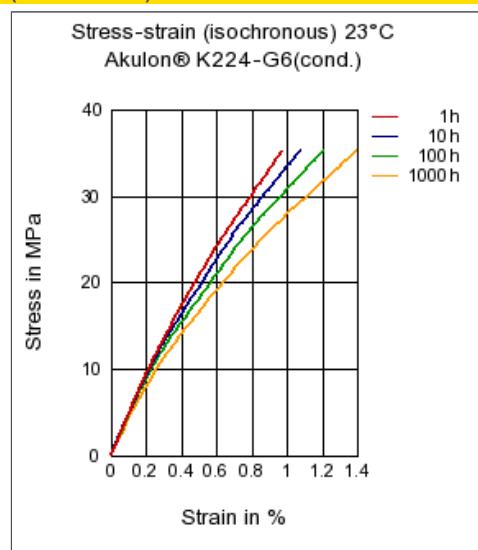
## Secant modulus-strain



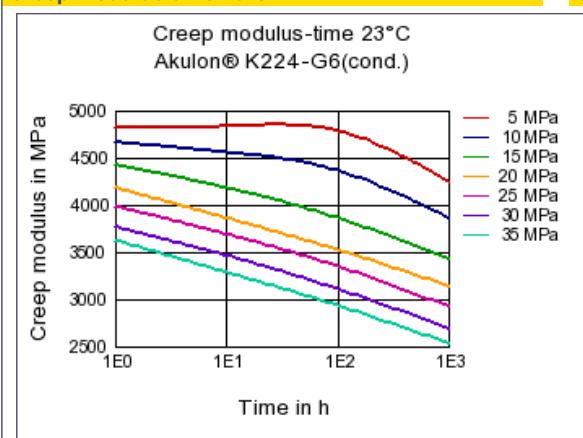
## Secant modulus-strain



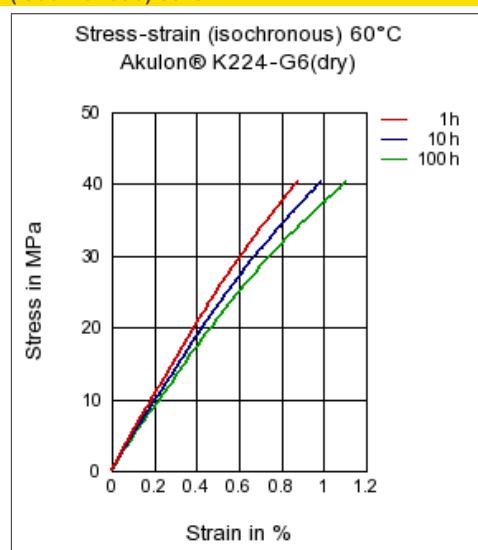
## Stress-strain (isochronous) 23°C



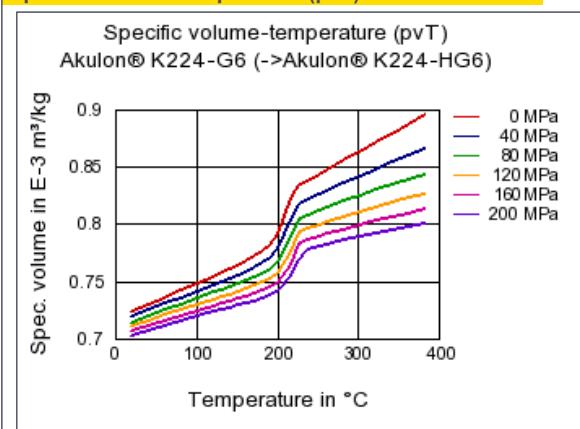
## Creep modulus-time 23°C



## Stress-strain (isochronous) 60°C



## Specific volume-temperature (pvT)



## Characteristics

## Processing

Injection Molding

## Additives

Release agent

## Delivery form

Pellets

## Other text information

## Injection Molding

[Injection Molding Recommendations](#)