


Akulon® K224-HG7

PA6-GF35

DSM Engineering Plastics

Product Texts

35% Glass Reinforced, Heat Stabilized

ISO 1043 PA6-GF35

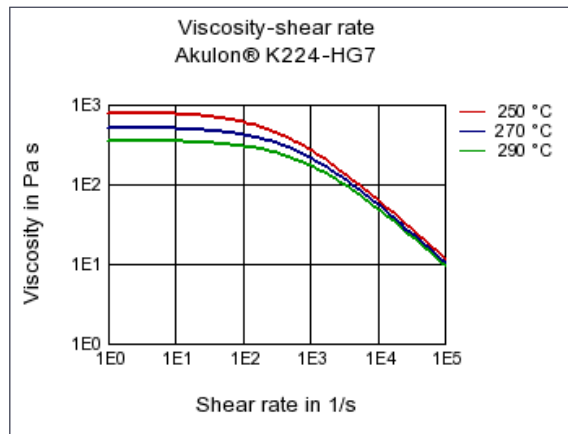
[Akulon website](#)

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.1 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577
Mechanical properties			
ISO Data			
Tensile Modulus	11500 / 7000	MPa	ISO 527-1/-2
Stress at break	195 / 125	MPa	ISO 527-1/-2
Strain at break	3.5 / 7	%	ISO 527-1/-2
Charpy impact strength (+23°C)	90 / 100	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	75 / 75	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	16 / 24	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	12 / 12	kJ/m ²	ISO 179/1eA
Thermal properties			
ISO Data			
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	210 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220 / *	°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	60 / *	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	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.7 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Electrical properties			
ISO Data			
Relative permittivity, 100Hz	3.5 / 14	-	IEC 60250
Relative permittivity, 1MHz	3.3 / 4.4	-	IEC 60250
Dissipation factor, 100Hz	50 / 3000	E-4	IEC 60250
Dissipation factor, 1MHz	150 / 1100	E-4	IEC 60250
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 60093
Surface resistivity	* / 1E13	Ohm	IEC 60093
Electric strength	35 / 25	kV/mm	IEC 60243-1
Comparative tracking index	- / 500	-	IEC 60112
Other properties			
ISO Data			
Water absorption	5.9 / *	%	Sim. to ISO 62
Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1400 / -	kg/m ³	ISO 1183

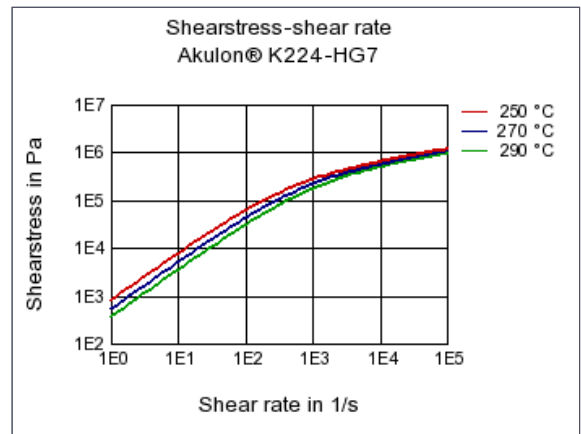
Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1150	kg/m ³	-
Thermal conductivity of melt	0.27	W/(m K)	-
Spec. heat capacity of melt	2110	J/(kg K)	-
Eff. thermal diffusivity	1.1E-7	m ² /s	-

Diagrams

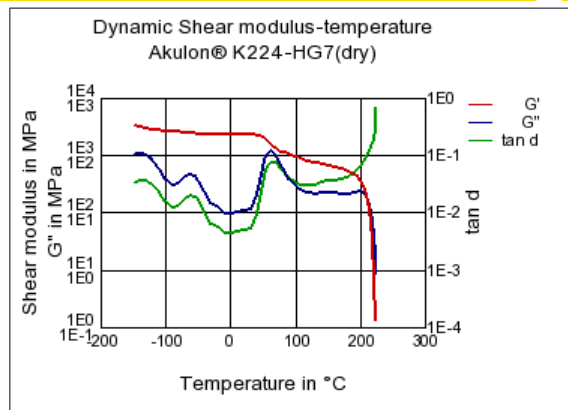
Viscosity-shear rate



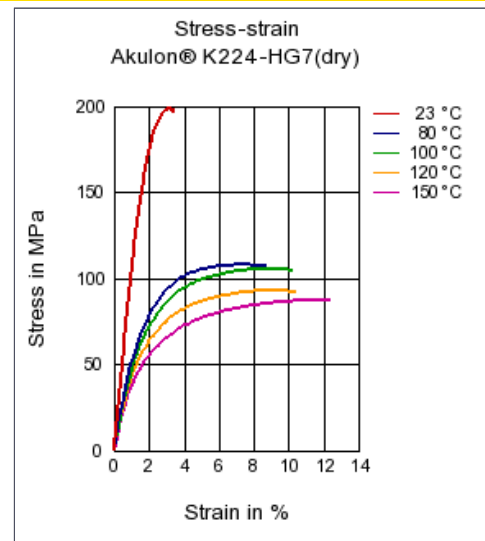
Shearstress-shear rate



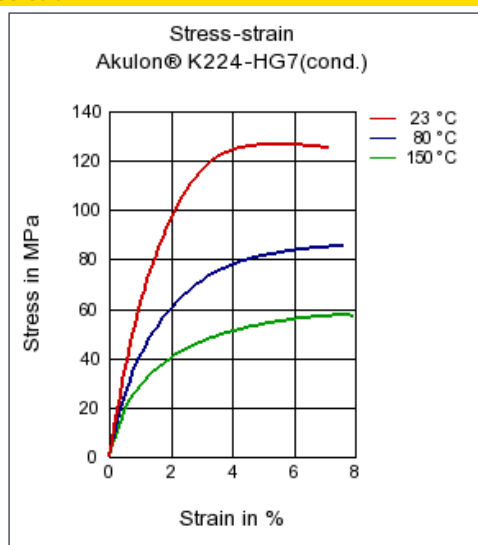
Dynamic Shear modulus-temperature



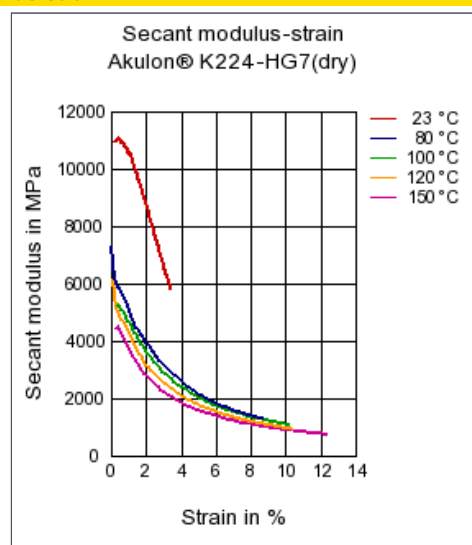
Stress-strain



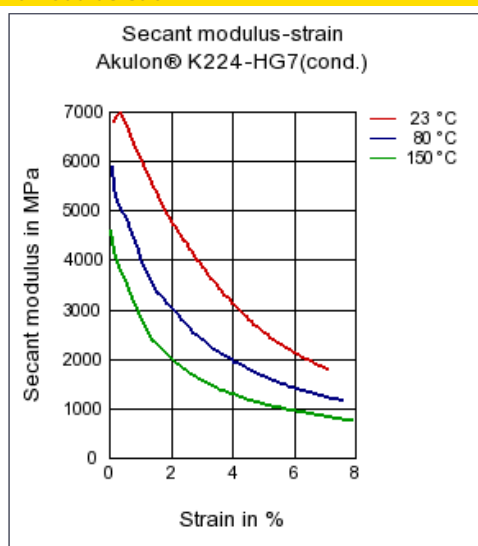
Stress-strain



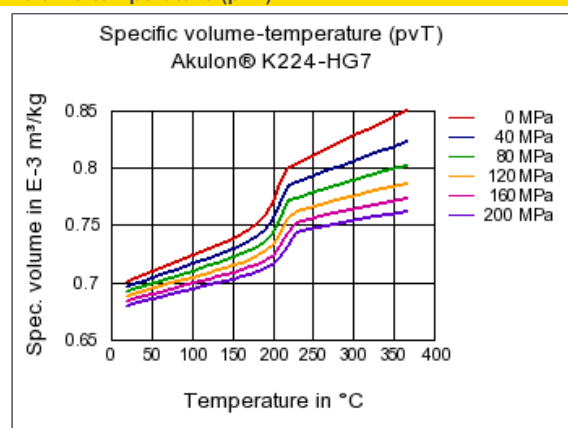
Secant modulus-strain



Secant modulus-strain



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

Heat stabilized or stable to heat

Other text information

Injection Molding

[Injection Molding Recommendations](#)