


Akulon® K222-KGV4

PA6-GF20 FR(30)

DSM Engineering Plastics

Product Texts

20% Glass Reinforced, Heat Stabilized, Flame Retardant (halogen- phosphorous-free)

ISO 1043 PA6-GF20 FR(30)

[Akulon website](#)

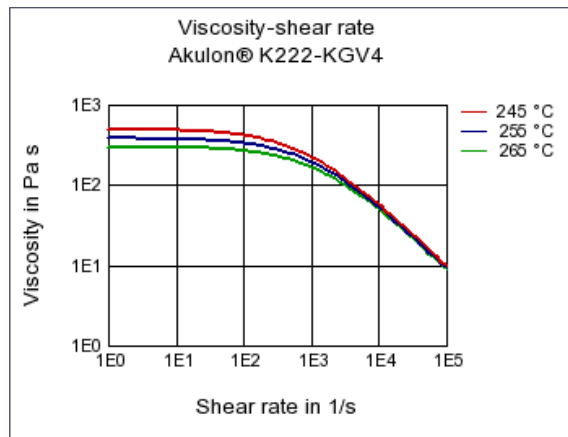
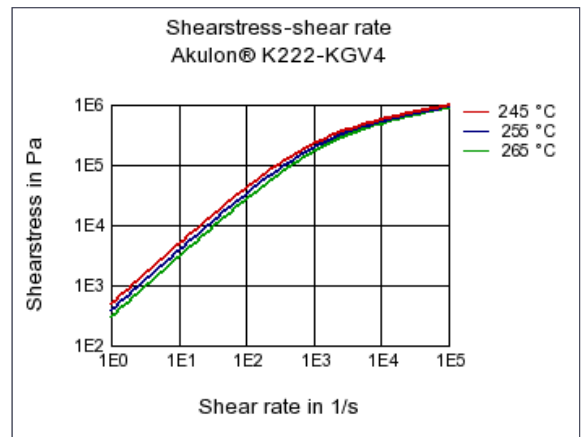
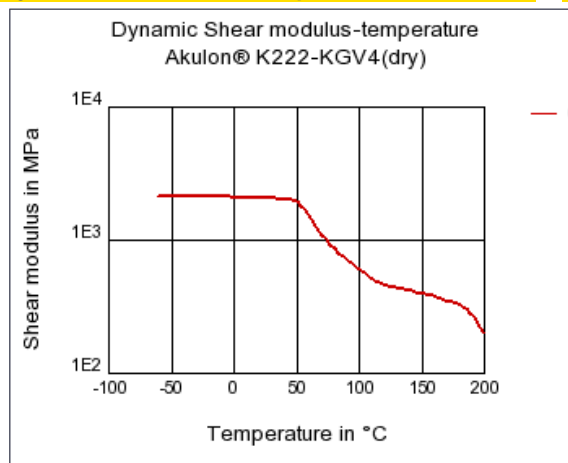
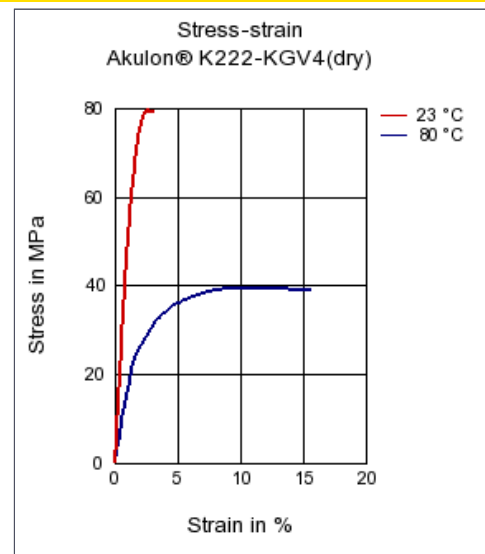
Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577
Mechanical properties			
ISO Data			
Tensile Modulus	5700 / 2500	MPa	ISO 527-1/-2
Stress at break	80 / 45	MPa	ISO 527-1/-2
Strain at break	3 / 15	%	ISO 527-1/-2
Charpy impact strength (+23°C)	46 / 93	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	40 / 40	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	4 / 9	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	4 / 4	kJ/m²	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)	170 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	210 / *	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Electrical properties			
ISO Data			
Relative permittivity, 100Hz	4.3 / 10	-	IEC 60250
Relative permittivity, 1MHz	3.8 / 3.9	-	IEC 60250
Dissipation factor, 100Hz	130 / 3000	E-4	IEC 60250
Dissipation factor, 1MHz	210 / 1000	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	600 / 600	-	IEC 60112
Other properties			
ISO Data			
Water absorption	6.5 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1340 / -	kg/m³	ISO 1183
Rheological calculation properties			
ISO Data			
Density of melt	1030	kg/m³	-

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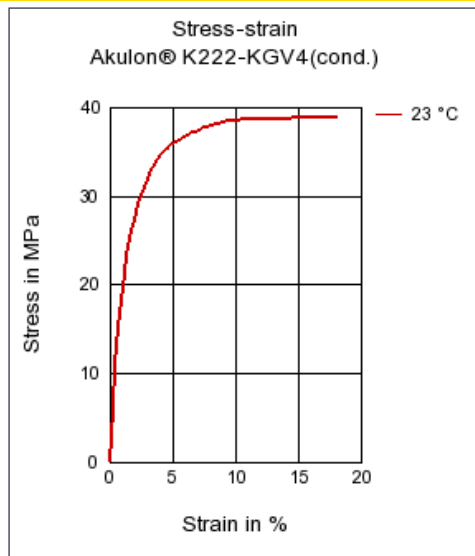
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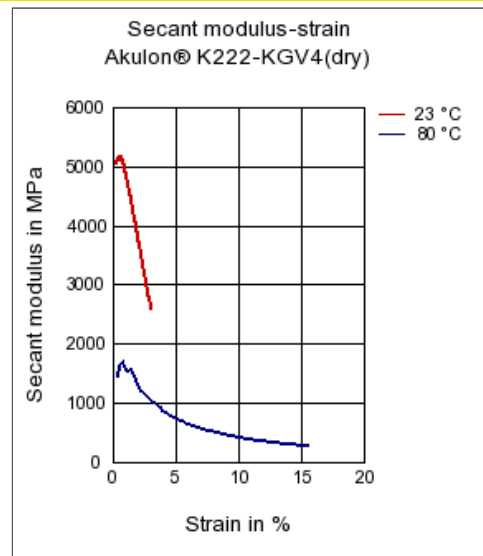
Thermal conductivity of melt	0.29	W/(m K)	-
Spec. heat capacity of melt	2270	J/(kg K)	-
Eff. thermal diffusivity	1.25E-7	m²/s	-

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

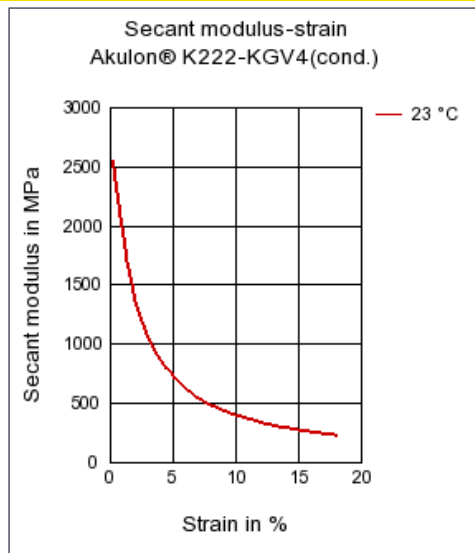
Stress-strain



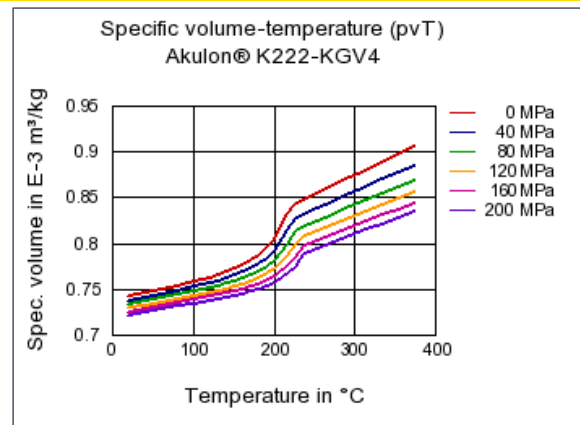
Secant modulus-strain



Secant modulus-strain



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

Flame retardant, Heat stabilized or stable to heat

Other text information

Injection Molding

[Injection Molding Recommendations](#)