



Akulon® K224-LG6 /E			
PA6-GF30			Envalior
Product Texts			
30% Glass Reinforced, Injection Molding, Improved UV-stability			
ISO 1043 PA6-GF30			
Rheological properties		dry / cond	Unit
ISO Data			
Melt volume-flow rate, MVR	40 / *	cm ³ /10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
Mechanical properties		dry / cond	Unit
ISO Data			
Tensile Modulus	9800 / 6000	MPa	ISO 527
Stress at break	195 / 110	MPa	ISO 527
Strain at break	3.6 / 7	%	ISO 527
Charpy impact strength, +23°C	90 / 110	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	12 / 25	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	11 / 11	kJ/m ²	ISO 179/1eA
Thermal properties		dry / cond	Unit
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	70 / *	E-6/K	ISO 11359-1/-2
Electrical properties		dry / cond	Unit
ISO Data			
Relative permittivity, 100Hz	3.5 / 20	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.3 / 5	-	IEC 62631-2-1
Dissipation factor, 100Hz	50 / 3000	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	150 / 1200	E-4	IEC 62631-2-1
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E13	Ohm	IEC 62631-3-2
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	- / 500	-	IEC 60112
Other properties		dry / cond	Unit
ISO Data			
Water absorption	6.3 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1350 / -	kg/m ³	ISO 1183
Rheological calculation properties		Value	Unit
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

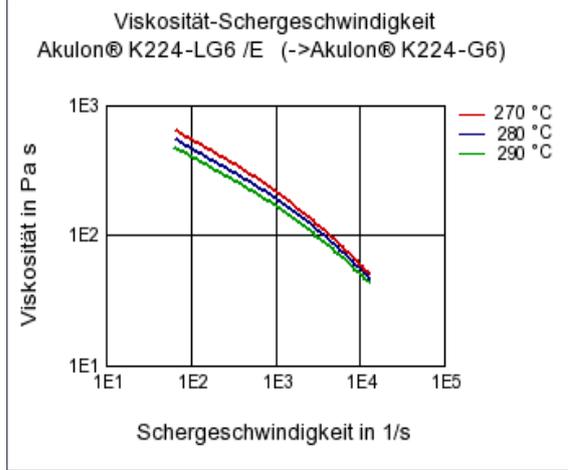
1.12E-7

m²/s

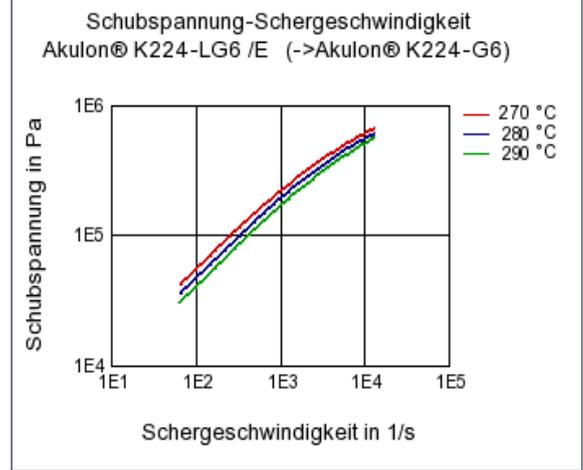
-

Diagrams

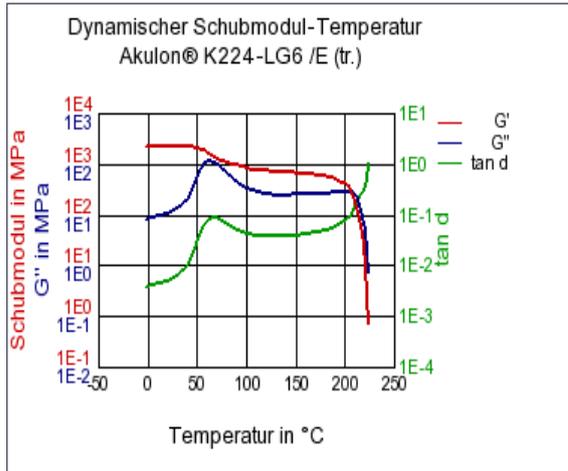
Viscosity-shear rate



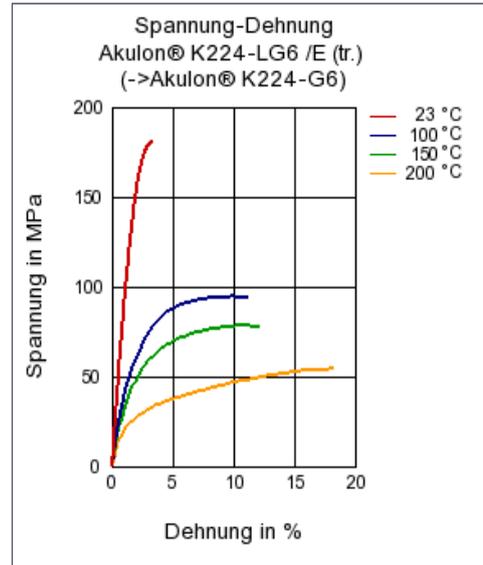
Shearstress-shear rate



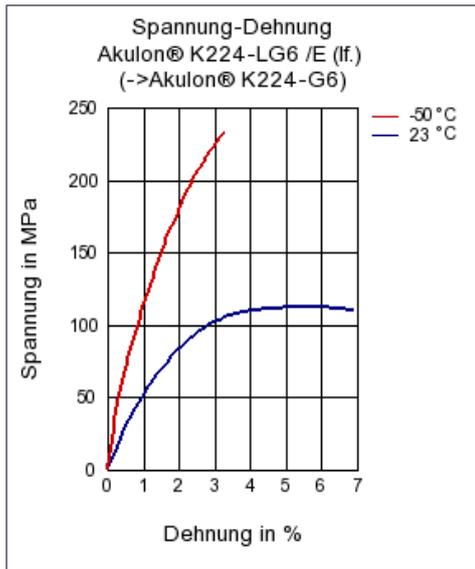
Dynamic Shear modulus-temperature



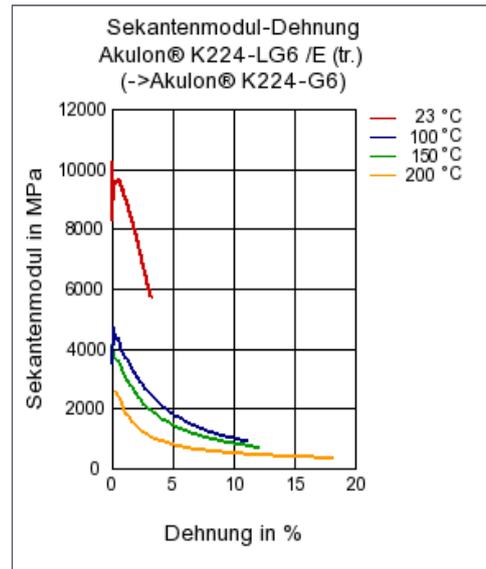
Stress-strain



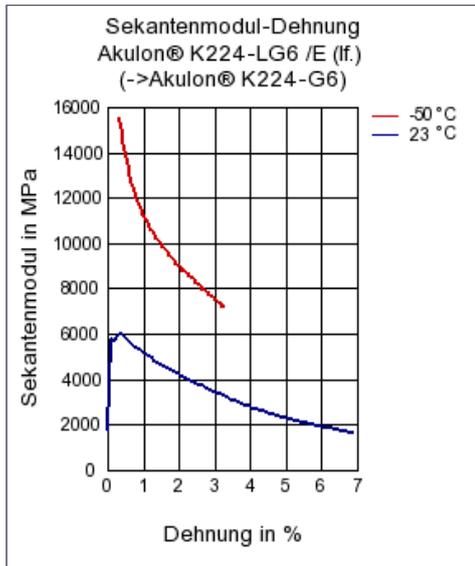
Stress-strain



Secant modulus-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

U.V. stabilized or stable to weather, Heat stabilized or stable to heat

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)
- ☹ Ethanol (23 °C)

Hydrocarbons

☹️ Toluene (23°C)

Ketones

☹️ Acetone (23°C)

Ethers

☹️ Diethyl ether (23°C)

Other

☹️ Ethyl Acetate (23°C)

☹️ Water (23°C)