


**Akulon® K225-KS**

PA6 FR(30)

DSM Engineering Plastics

**Product Texts**

Flame Retardant (halogen free), Heat Stabilized

ISO 1043 PA6 FR(30)

[Akulon website](#)

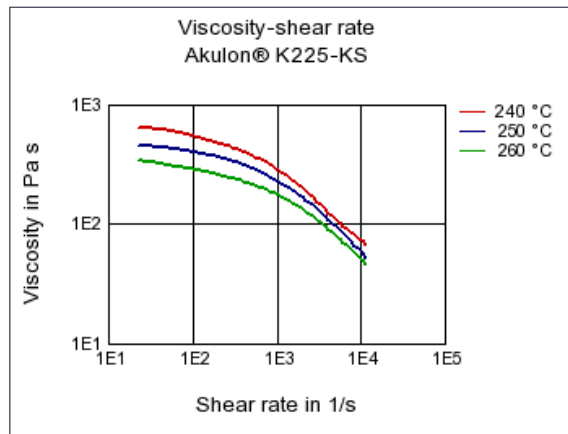
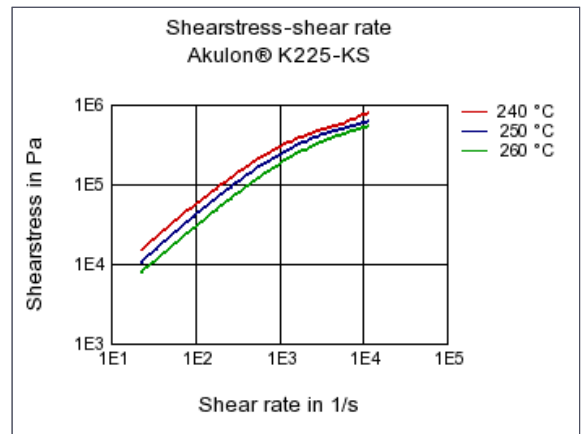
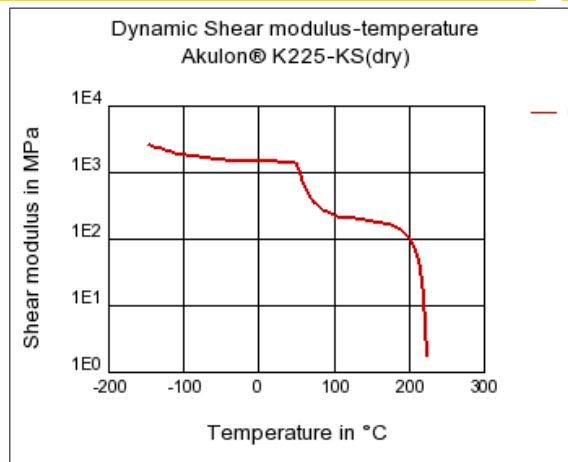
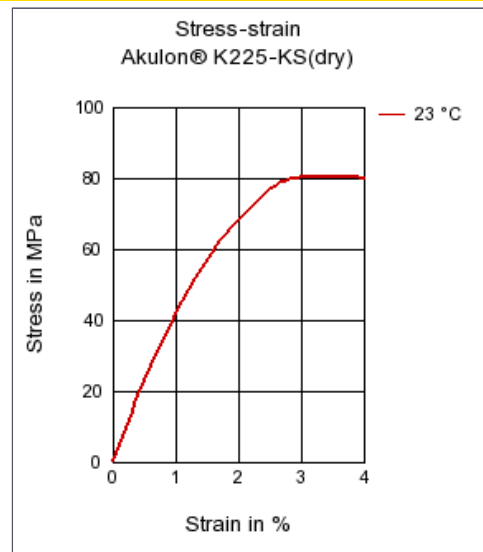
Rheological properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	3800 / 1400	MPa	ISO 527-1/-2
Yield stress	80 / 40	MPa	ISO 527-1/-2
Yield strain	3.5 / 22	%	ISO 527-1/-2
Nominal strain at break	8 / >50	%	ISO 527-1/-2
Charpy impact strength (+23°C)	60 / -	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	55 / -	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	6 / 10	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	5 / 5	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	75 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	180 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	90 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
Burning beh. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning beh. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
<b>Electrical properties</b>			
<b>ISO Data</b>			
Relative permittivity, 100Hz	3.3 / 8	-	IEC 60250
Relative permittivity, 1MHz	3.2 / 3.6	-	IEC 60250
Dissipation factor, 100Hz	90 / 1250	E-4	IEC 60250
Dissipation factor, 1MHz	200 / 800	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
<b>Other properties</b>			
<b>ISO Data</b>			
Water absorption	9 / *	%	Sim. to ISO 62
Humidity absorption	2.5 / *	%	Sim. to ISO 62
Density	1180 / -	kg/m <sup>3</sup>	ISO 1183

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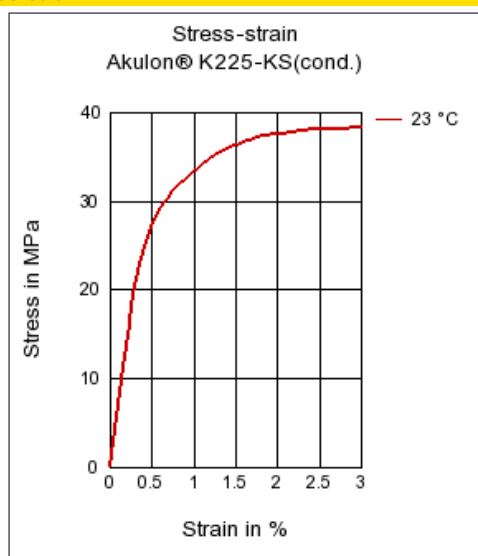
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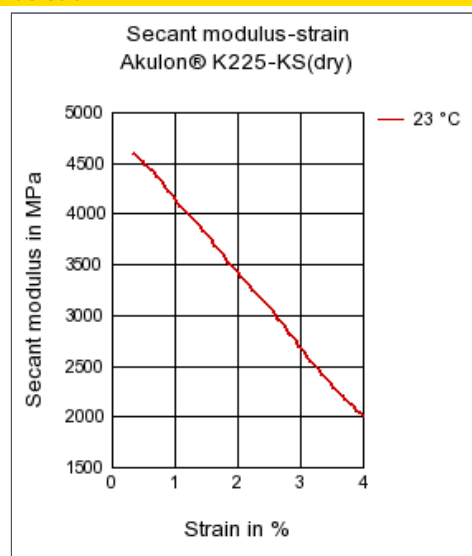
Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	898	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.28	W/(m K)	-
Spec. heat capacity of melt	2530	J/(kg K)	-
Eff. thermal diffusivity	1.22E-7	m <sup>2</sup> /s	-

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

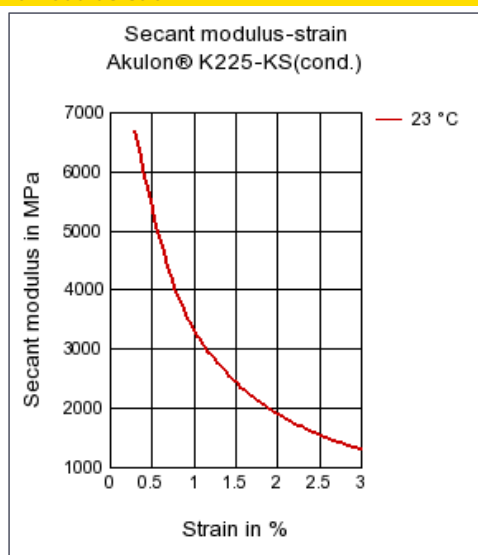
## Stress-strain



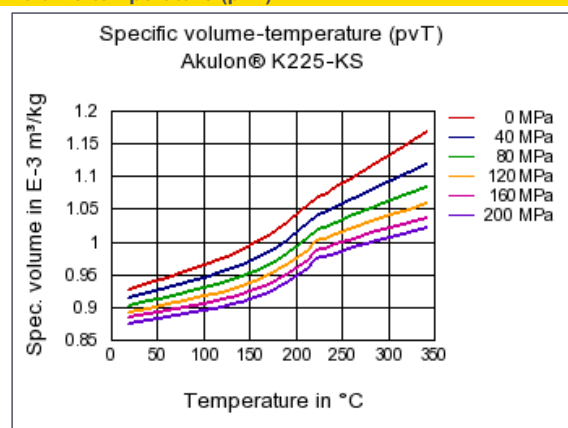
## Secant modulus-strain



## Secant modulus-strain



## 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](#)