

Akulon® Ultraflow K-FG3

PA6-GF15

DSM Engineering Plastics

Product Texts

15% Glass Reinforced, High Flow

ISO 1043 PA6-GF15

[Akulon website](#)

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
Mechanical properties			
ISO Data	dry / cond	Unit	Test Standard
	Tensile Modulus	5800 / 3400	MPa
	Stress at break	110 / 65	MPa
	Strain at break	3 / 8.5	%
	Charpy impact strength (+23°C)	25 / 35	kJ/m ²
	Charpy impact strength, -30°C	20 / 20	kJ/m ²
	Charpy notched impact strength (+23°C)	6 / 15	kJ/m ²
	Charpy notched impact strength, -30°C	5 / 5	kJ/m ²
Thermal properties			
ISO Data	dry / cond	Unit	Test Standard
	Melting temperature (10°C/min)	220 / *	°C
	Temp. of deflection under load (1.80 MPa)	195 / *	°C
	Temp. of deflection under load (0.45 MPa)	215 / *	°C
	Coeff. of linear therm. expansion, parallel	30 / *	E-6/K
	Coeff. of linear therm. expansion, normal	80 / *	E-6/K
	Burning behav. at 1.5 mm nom. thickn.	HB / *	class
	Thickness tested	1.6 / *	mm
Electrical properties			
ISO Data	dry / cond	Unit	Test Standard
	Relative permittivity, 100Hz	3.5 / 14	-
	Relative permittivity, 1MHz	4.7 / 4.5	-
	Dissipation factor, 100Hz	55 / 1500	E-4
	Dissipation factor, 1MHz	180 / 1200	E-4
	Volume resistivity	>1E13 / >1E13	Ohm*m
	Surface resistivity	* / 1E14	Ohm
	Comparative tracking index	- / 600	-
Other properties			
ISO Data	dry / cond	Unit	Test Standard
	Water absorption	7.6 / *	%
	Humidity absorption	2.3 / *	%
	Density	1230 / -	kg/m ³
Rheological calculation properties			
ISO Data	Value	Unit	Test Standard
	Density of melt	1060	kg/m ³
	Thermal conductivity of melt	0.19	W/(m K)
	Spec. heat capacity of melt	2510	J/(kg K)
	Eff. thermal diffusivity	7.23E-8	m ² /s

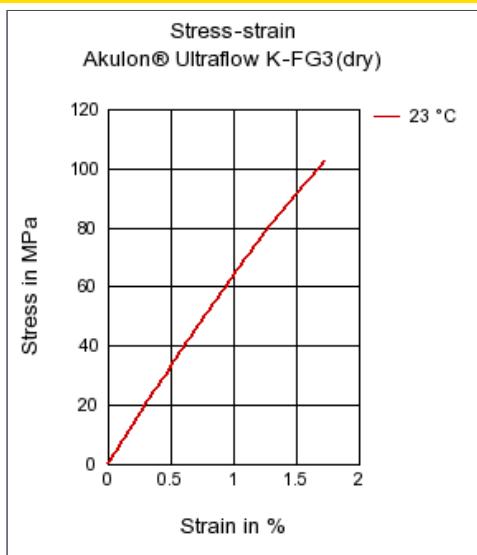
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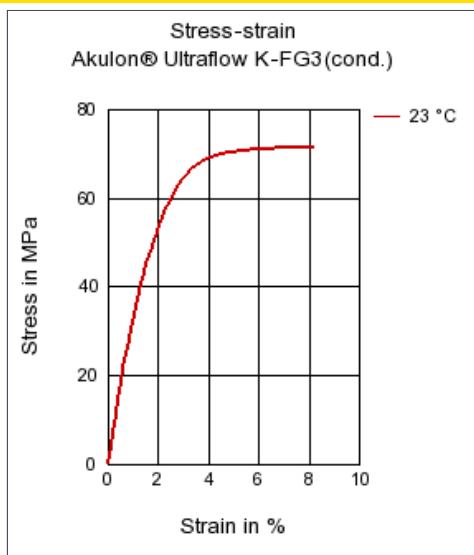
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Diagrams

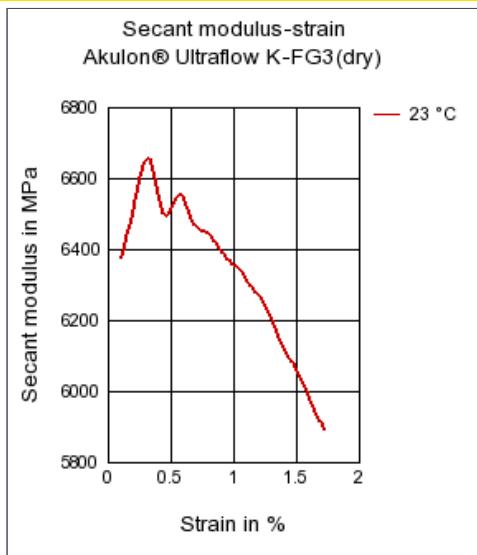
Stress-strain



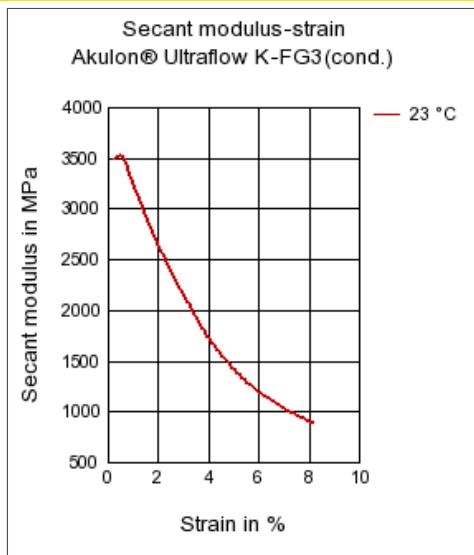
Stress-strain



Secant modulus-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Other text information

Injection Molding

[Injection Molding Recommendations](#)