Akulon® Ultraflow K-FKGS6 /B

PA6-GF30 FR(17) DSM Engineering Plastics

Product Texts

30% Glass Reinforced, Heat Stabilized, Flame Retardant, High Flow

ISO 1043 PA6-GF30 FR(17)

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	11500 / 7000	MPa	ISO 527-1/-2
Stress at break	150 / 100	MPa	ISO 527-1/-2
Strain at break	2.5 / 5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	60 / 60	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	60 / 60	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13 / 15	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	12 / 12	kJ/m²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	205 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°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	110 / *	E-6/K	ISO 11359-1/-2
Burning behav. 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 behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.5 / 10	-	IEC 60250
Relative permittivity, 1MHz	3.4 / 4	-	IEC 60250
Dissipation factor, 100Hz	60 / 3000	E-4	IEC 60250
Dissipation factor, 1MHz	120 / 700	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Comparative tracking index	325 / -	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	4.5 / *	%	Sim. to ISO 62
Humidity absorption	1.3 / *	%	Sim. to ISO 62
Density	1590 / -	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1150	kg/m³	-
Thermal conductivity of melt	0.26	W/(m K)	-
Spec. heat capacity of melt	1900	J/(kg K)	-
Eff. thermal diffusivity	1.2E-7	m²/s	-

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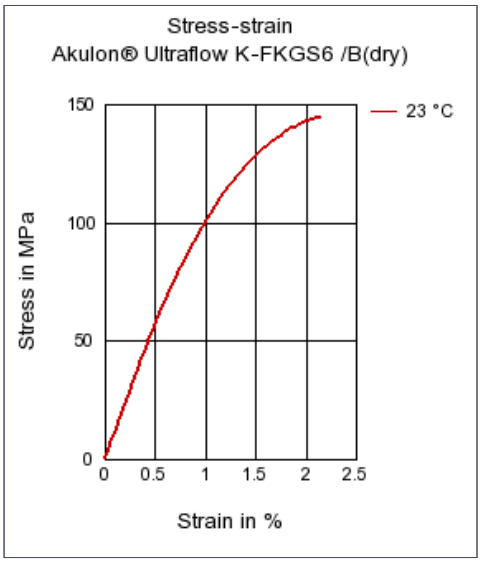
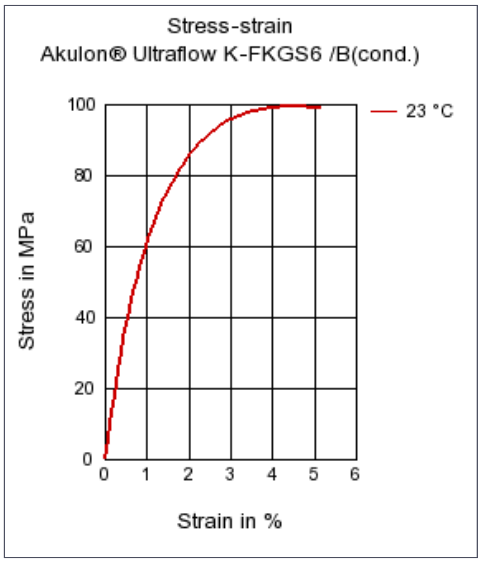
Diagrams

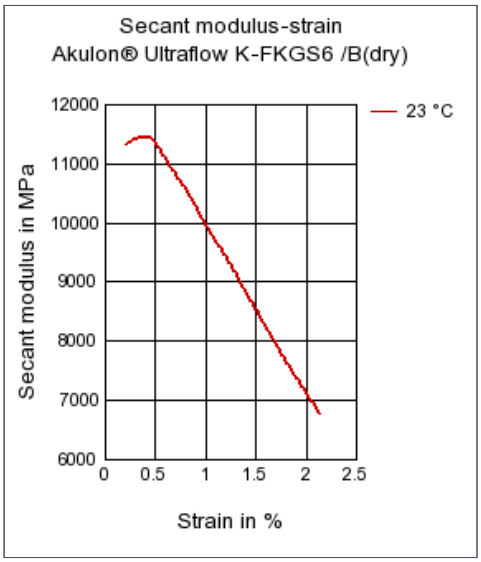
Stress-strain



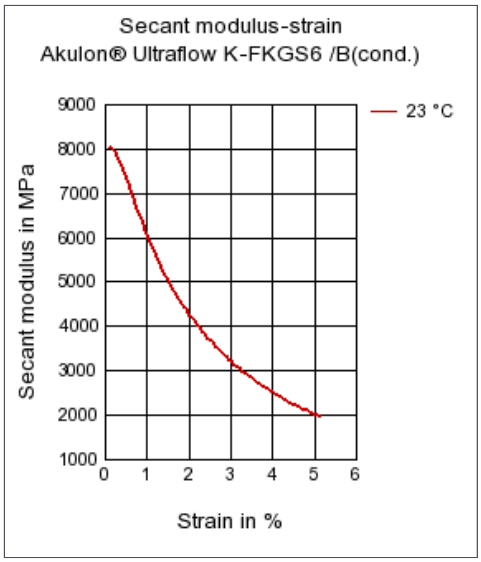
Stress-strain



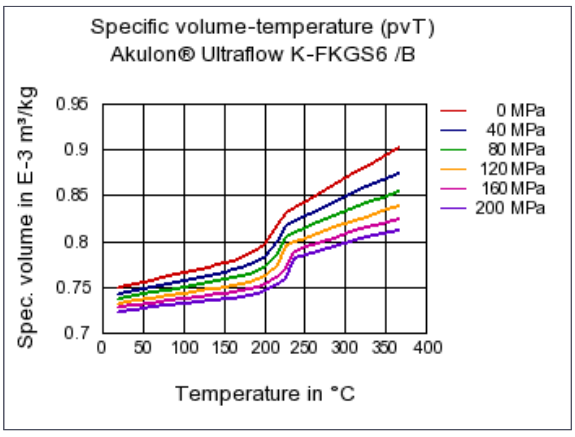
Secant modulus-strain



Secant modulus-strain



Specific volume-temperature (pvT)



Characteristics

Akulon® Ultraflow K-FKGS6 /B

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Processing
Injection Molding

Special Characteristics
Flame retardant, Heat stabilized or stable to heat

Delivery form
Pellets

Other text information

Injection Molding
Injection Molding Recommendations