



This datasheet of **Akulon® Care K1G6** from **Envalior** is provided by the international plastics database **CAMPUS**.

Akulon® Care K1G6 | PA6-GF30 | Envalior

Product Texts

30% Glass Reinforced, Medical grade, Food Contact Quality

ISO 1043 PA6-GF30

Rheological properties

	dry / cond	Unit
Melt volume-flow rate, MVR	6.4 / *	cm³/10min
Temperature	240 / *	°C
Load	2.16 / *	kg
Molding shrinkage, parallel	0.3 / *	%
Molding shrinkage, normal	0.9 / *	%

Mechanical properties

	dry / cond	Unit
Tensile modulus	9500 / 6000	MPa
Stress at break	180 / 110	MPa
Strain at break	3.5 / 7	%
Charpy impact strength, +23°C	90 / 110	kJ/m²
Charpy impact strength, -30°C	75 / 75	kJ/m²
Charpy notched impact strength, +23°C	12 / 25	kJ/m²
Charpy notched impact strength, -30°C	11 / 11	kJ/m²
Shore D hardness	- / 85	-

Thermal properties

	dry / cond	Unit
Melting temperature, 10°C/min	220 / *	°C
Temp. of deflection under load, 1.80 MPa	200 / *	°C
Temp. of deflection under load, 0.45 MPa	220 / *	°C
Coeff. of linear therm. expansion, parallel	20 / *	E-6/K
Coeff. of linear therm. expansion, normal	70 / *	E-6/K
Burning behavior at 1.5 mm nominal thickness	HB / *	class

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Thickness tested (1.5)

1.5 / * mm

Yellow Card available

Burning behavior at thickness h

Thickness tested (h)

Yellow Card available

Electrical properties

Relative permittivity, 100Hz

Relative permittivity, 1MHz

Dissipation factor, 100Hz

Dissipation factor, 1MHz

Volume resistivity

Surface resistivity

Electric strength

Comparative tracking index

Other properties

Water absorption

Humidity absorption

Density

Rheological calculation properties

Density of melt

Thermal conductivity of melt

Spec. heat capacity melt

Eff. thermal diffusivity

Yes / * -

HB / * class

3.0 / * mm

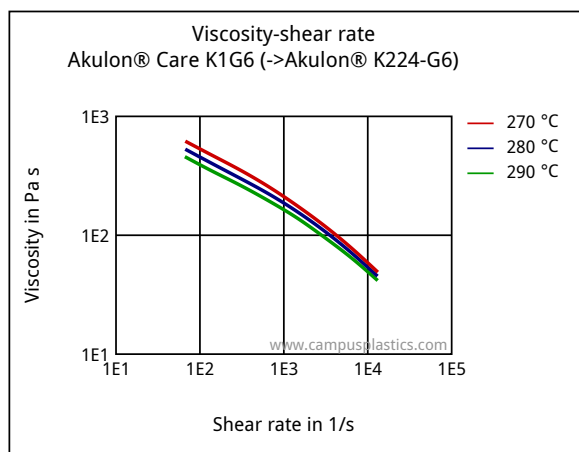
Yes / * -

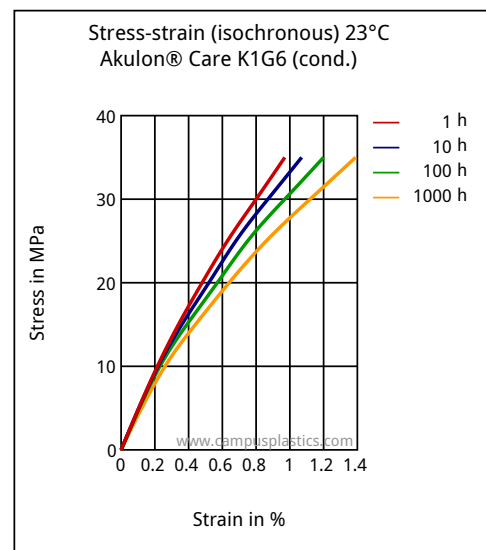
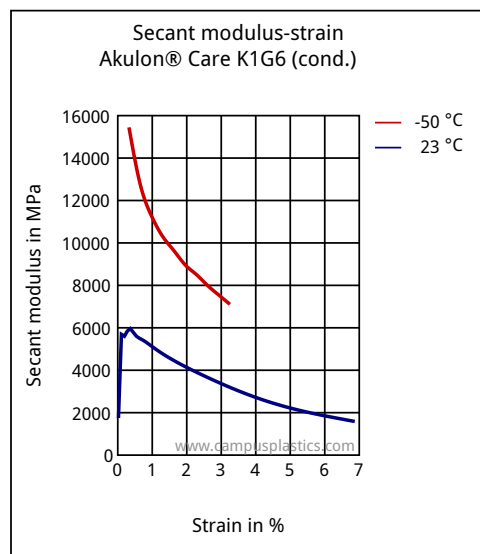
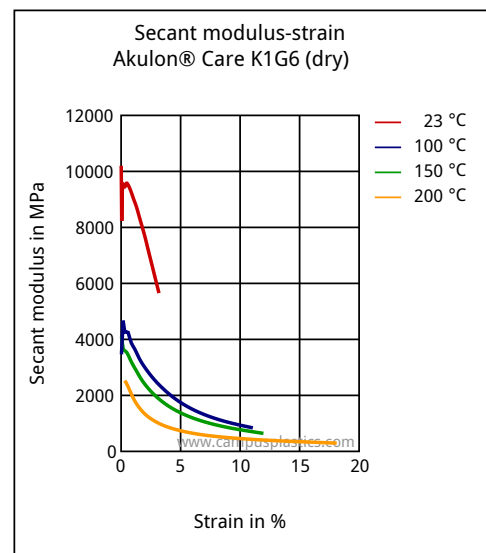
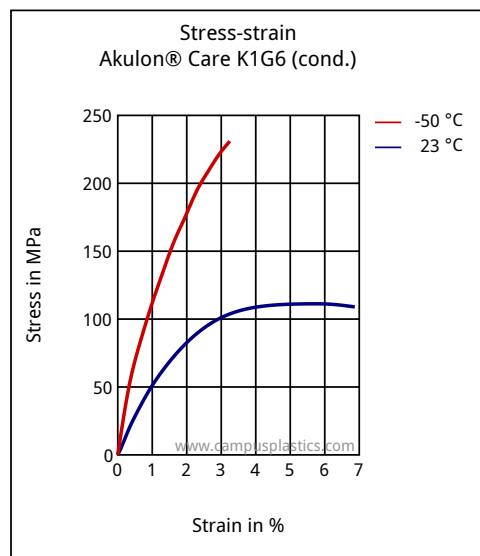
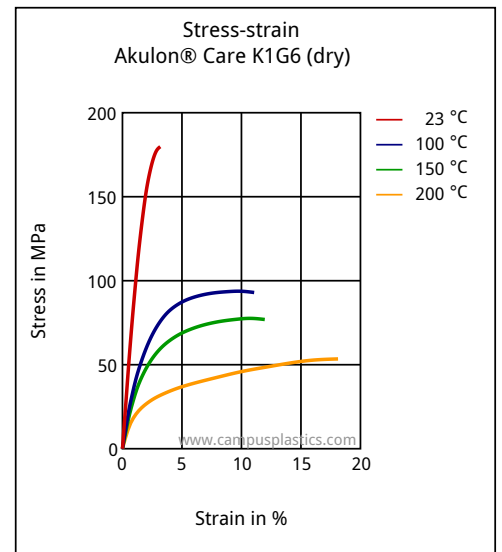
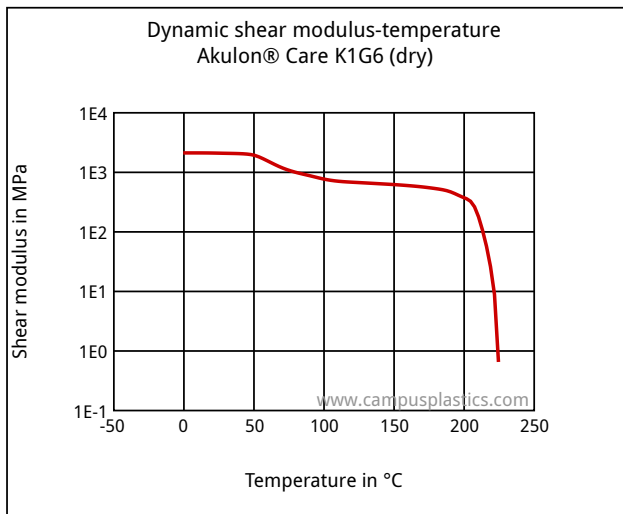
dry / cond	Unit
3.5 / 20	-
3.3 / 5	-
50 / 3000	E-4
150 / 1200	E-4
1E13 / 1E11	Ohm*m
* / 1E14	Ohm
30 / 25	kV/mm
* / 600	-

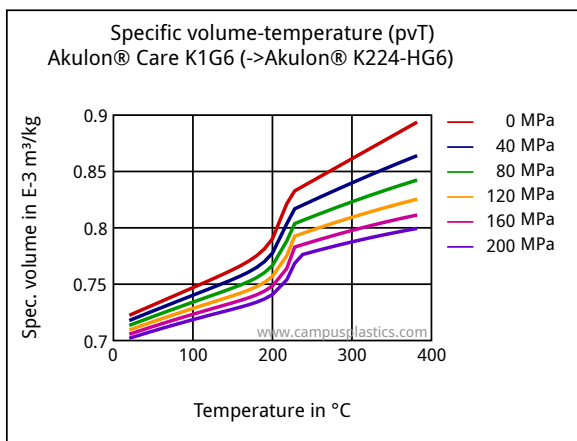
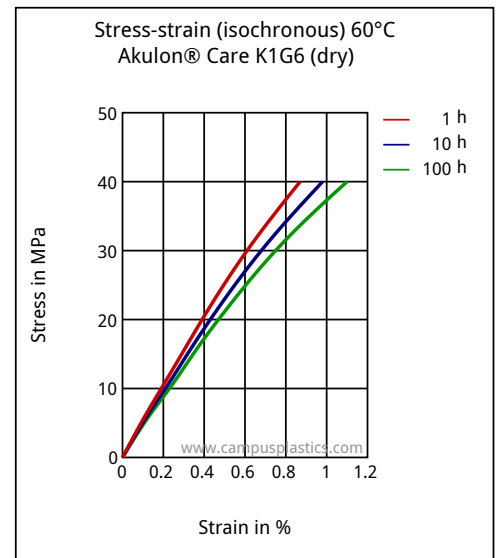
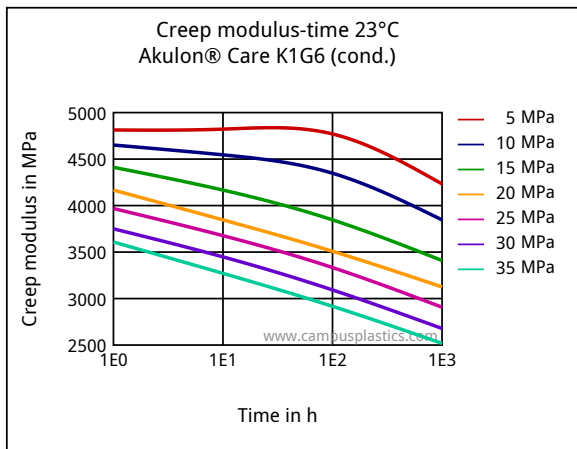
dry / cond	Unit
6.3 / *	%
1.9 / *	%
1350 / -	kg/m ³

Value	Unit
1150	kg/m ³
0.27	W/(m K)
2110	J/(kg K)
1.12E-7	m ² /s

Diagrams







Characteristics

Processing

Injection Molding

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific

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)

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Hydrocarbons

Toluene (23°C)

Ketones

Acetone (23°C)

Ethers

Diethyl ether (23°C)

Other

Ethyl Acetate (23°C)

Water (23°C)

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