



This datasheet of **Akulon® Fuel Lock FLE-LP NA99001** from **Envalior** is provided by the international plastics database **CAMPUS**.

## Akulon® Fuel Lock FLE-LP NA99001 | PA6-I | Envalior

### Product Texts

Low fuel permeation PA6 suitable for use in injection molding/welding of small engine fuel tanks

ISO 1043 PA6-I

### Rheological properties

	dry / cond	Unit
Melt volume-flow rate, MVR	13 / *	cm <sup>3</sup> /10min
Temperature	250 / *	°C
Load	2.16 / *	kg
Molding shrinkage, parallel	1.9 / *	%
Molding shrinkage, normal	1.8 / *	%

### Mechanical properties

	dry / cond	Unit
Tensile modulus	1750 / 530	MPa
Yield stress	43 / -	MPa
Yield strain	4.2 / -	%
Nominal strain at break	>50 / -	%
Charpy impact strength, +23°C	N / N	kJ/m <sup>2</sup>
Charpy impact strength, -30°C	N / N	kJ/m <sup>2</sup>
Charpy notched impact strength, +23°C	80 / N	kJ/m <sup>2</sup>
Charpy notched impact strength, -30°C	22 / 20	kJ/m <sup>2</sup>
Puncture - maximum force, +23°C	3300 / -	N
Puncture energy, +23°C	48 / -	J

### Thermal properties

	dry / cond	Unit
Temp. of deflection under load, 1.80 MPa	55 / *	°C
Temp. of deflection under load, 0.45 MPa	100 / *	°C
Vicat softening temperature, 50°C/h 50N	130 / *	°C

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Coeff. of linear therm. expansion, parallel	100 / *	E-6/K
Coeff. of linear therm. expansion, normal	110 / *	E-6/K

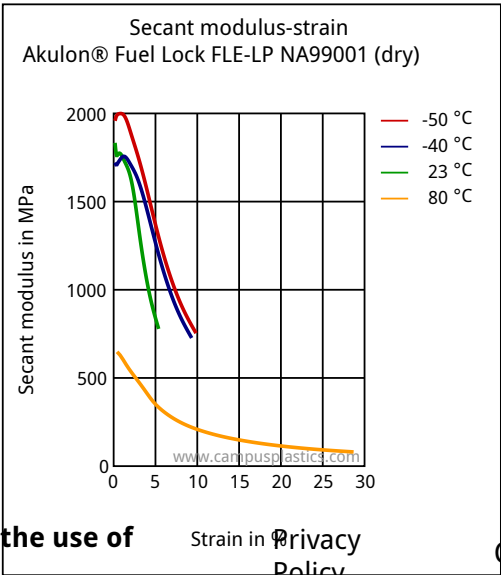
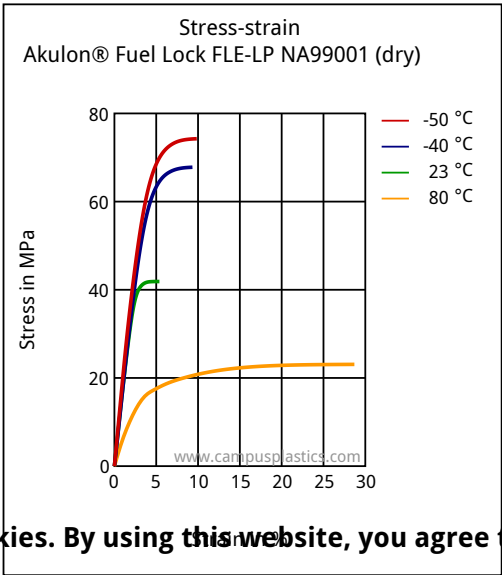
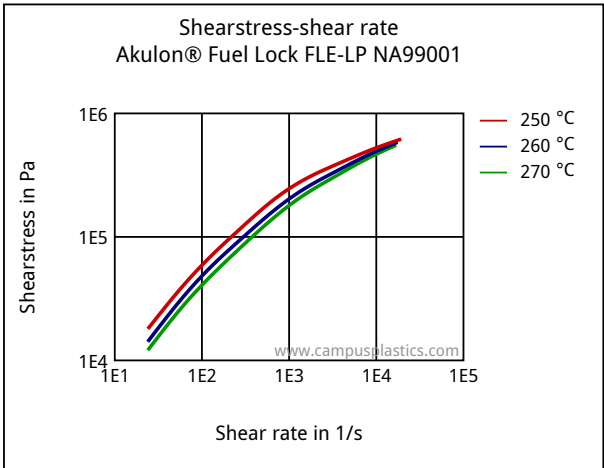
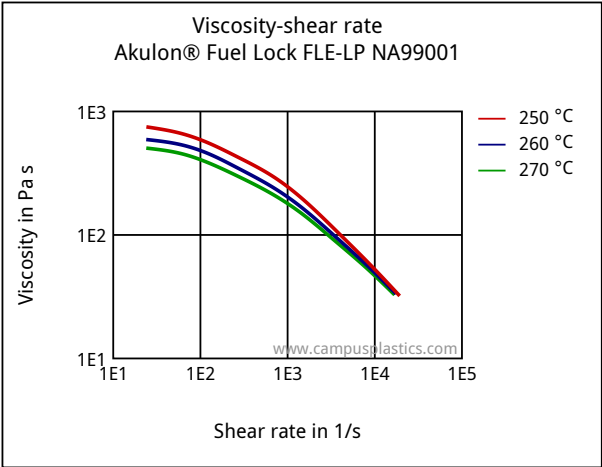
### Other properties

Water absorption	7 / *	%
Humidity absorption	2.5 / *	%
Density	1060 / -	kg/m³

### Rheological calculation properties

Density of melt	869	kg/m³
Thermal conductivity of melt	0.22	W/(m K)
Spec. heat capacity melt	2740	J/(kg K)
Eff. thermal diffusivity	9.37E-8	m²/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)

### 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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