

# CAMPUS® Datasheet

# Envalior

Akulon® K224-HG7 - PA6-GF35

Envalior

## Product Texts

35% Glass Reinforced, Heat Stabilized

ISO 1043 PA6-GF35

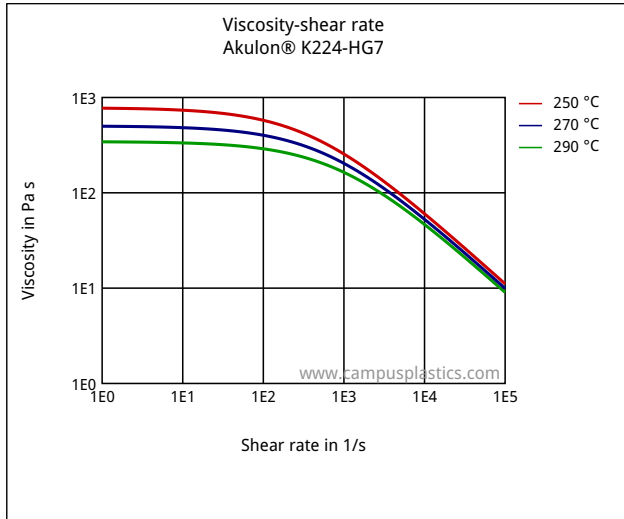
Rheological properties	dry / cond	Unit	Test Standard
Melt volume-flow rate, MVR	40 / *	cm <sup>3</sup> /10min	ISO 1133
Temperature	275 / *	°C	ISO 1133
Load	5 / *	kg	ISO 1133
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
Mechanical properties	dry / cond	Unit	Test Standard
Tensile modulus	11000 / 7000	MPa	ISO 527-1/-2
Stress at break	195 / 125	MPa	ISO 527-1/-2
Strain at break	3.5 / 7	%	ISO 527-1/-2
Charpy impact strength, +23°C	90 / 100	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	75 / 75	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	14 / 24	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	12 / 12	kJ/m <sup>2</sup>	ISO 179/1eA
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	210 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	220 / *	°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	60 / *	E-6/K	ISO 11359-1/-2
Burning behavior at 1.5 mm nominal thickness	HB / *	class	IEC 60695-11-10
Thickness tested (1.5)	1.5 / *	mm	IEC 60695-11-10
Yellow Card available	Yes / *	-	-
Burning behavior at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested (h)	3.0 / *	mm	IEC 60695-11-10
Yellow Card available	Yes / *	-	-
Electrical properties	dry / cond	Unit	Test Standard
Relative permittivity, 100Hz	4.8 / -	-	IEC 62631-2-1
Relative permittivity, 1MHz	4.3 / -	-	IEC 62631-2-1
Dissipation factor, 100Hz	170 / -	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	220 / -	E-4	IEC 62631-2-1
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E13	Ohm	IEC 62631-3-2
Electric strength	35 / 25	kV/mm	IEC 60243-1
Comparative tracking index	* / 500	-	IEC 60112
Other properties	dry / cond	Unit	Test Standard
Water absorption	5.9 / *	%	Sim. to ISO 62
Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1400 / -	kg/m <sup>3</sup>	ISO 1183

**Akulon® K224-HG7 - PA6-GF35**  
**Envalior**

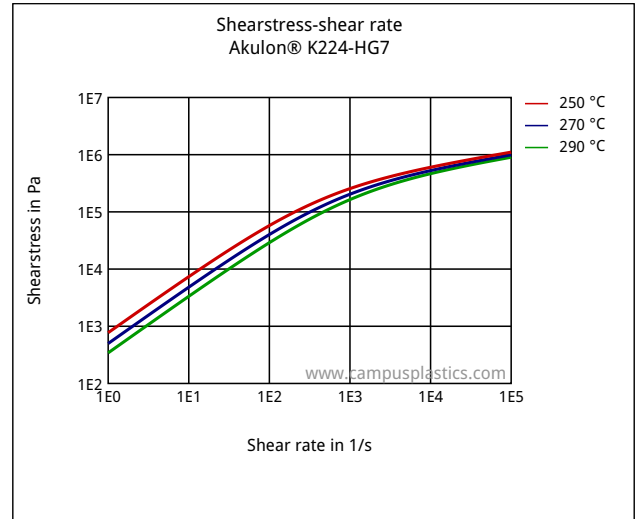
Rheological calculation properties	Value	Unit	Test Standard
Density of melt	1150	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.27	W/(m K)	-
Spec. heat capacity melt	2110	J/(kg K)	-
Eff. thermal diffusivity	1.4E-7	m <sup>2</sup> /s	-

**Diagrams**

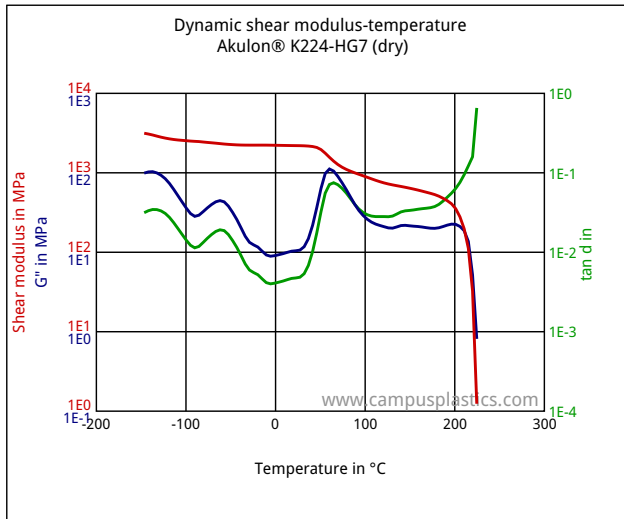
**Viscosity-shear rate**



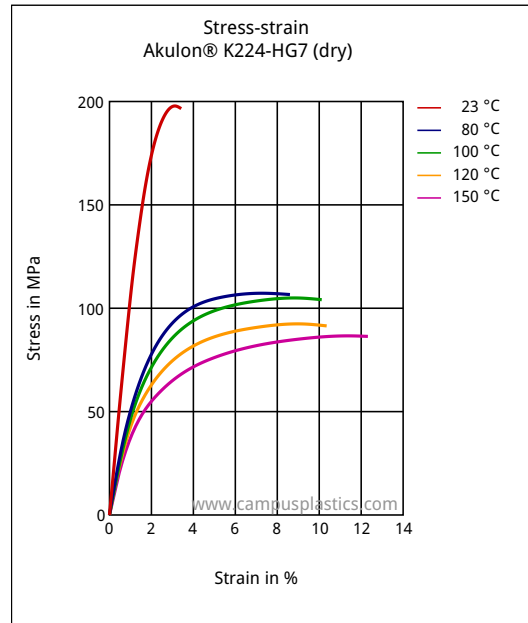
**Shearstress-shear rate**



**Dynamic shear modulus-temperature**

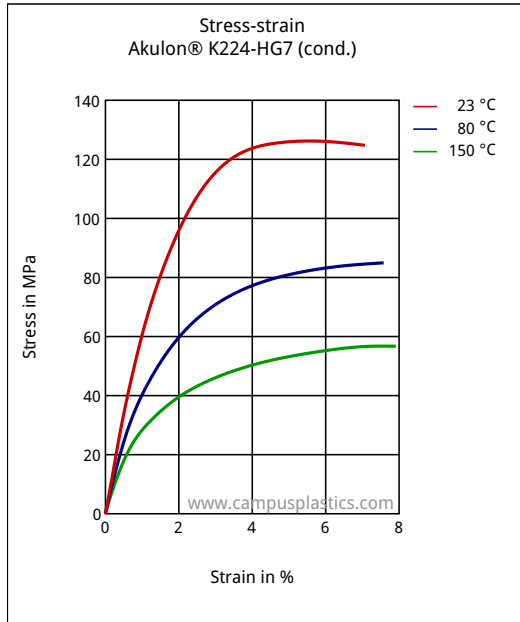


**Stress-strain**

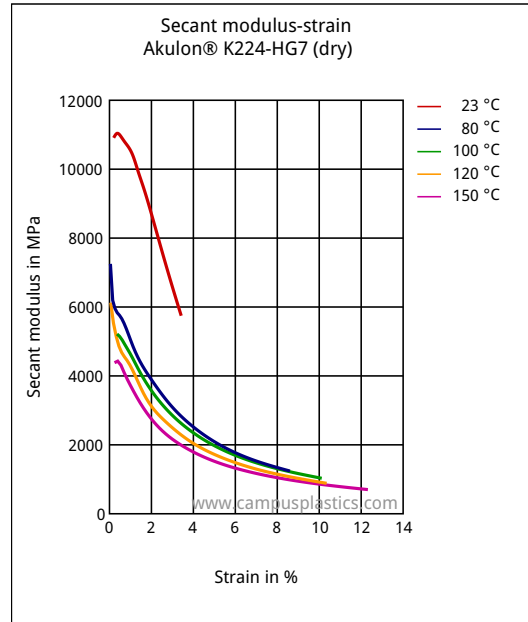


**Akulon® K224-HG7 - PA6-GF35**  
**Envalior**

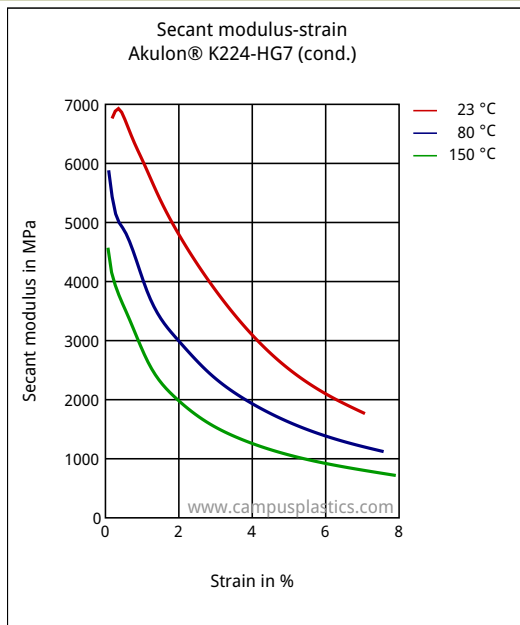
**Stress-strain**



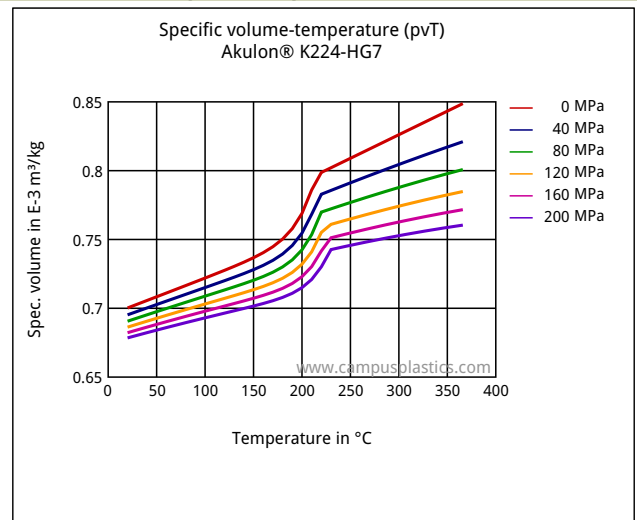
**Secant modulus-strain**



**Secant modulus-strain**



**Specific volume-temperature (pvT)**



**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Other text information**

**Special Characteristics**

Heat stabilized or stable to heat

**Regional Availability**

North America, Europe, Asia Pacific

# Akulon® K224-HG7 - PA6-GF35

## Envalior

### 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)

All the trademarks mentioned here are trademarks of Envalior.

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.

Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.

Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.

Copyright © Envalior 2024. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.