


**Akulon® K223-P2**

PA6-I

DSM Engineering Plastics

**Product Texts**

Impact Modified

ISO 1043 PA6-I

[Akulon website](#)

Rheological properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	1.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.4 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	2500 / 750	MPa	ISO 527-1/-2
Yield stress	70 / 38	MPa	ISO 527-1/-2
Yield strain	4 / 25	%	ISO 527-1/-2
Nominal strain at break	>50 / >50	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	16 / -	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	8 / 8	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
<b>ISO Data</b>			
Temp. of deflection under load (1.80 MPa)	55 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	130 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	100 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	140 / *	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	IEC 60695-11-10
<b>Electrical properties</b>			
<b>ISO Data</b>			
Relative permittivity, 100Hz	3.4 / 14	-	IEC 60250
Relative permittivity, 1MHz	3.1 / 4.5	-	IEC 60250
Dissipation factor, 100Hz	80 / 3000	E-4	IEC 60250
Dissipation factor, 1MHz	200 / 1200	E-4	IEC 60250
Volume resistivity	1E13 / 1E10	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	28 / 20	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112
<b>Other properties</b>			
<b>ISO Data</b>			
Water absorption	9 / *	%	Sim. to ISO 62
Humidity absorption	2.5 / *	%	Sim. to ISO 62
Density	1110 / -	kg/m <sup>3</sup>	ISO 1183
<b>Rheological calculation properties</b>			
<b>ISO Data</b>			
Density of melt	915	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.23	W/(m K)	-
Spec. heat capacity of melt	2710	J/(kg K)	-

Eff. thermal diffusivity

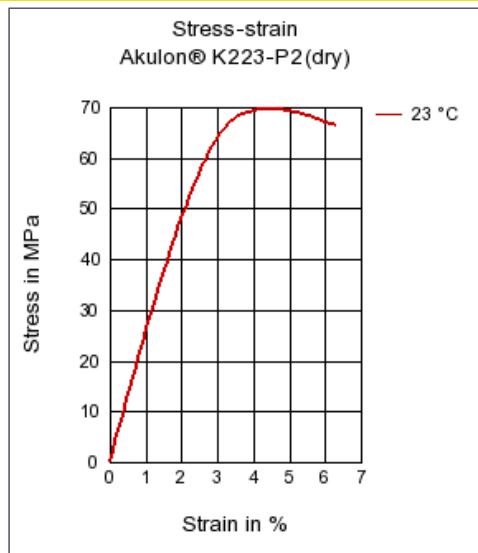
9.28E-8

m²/s

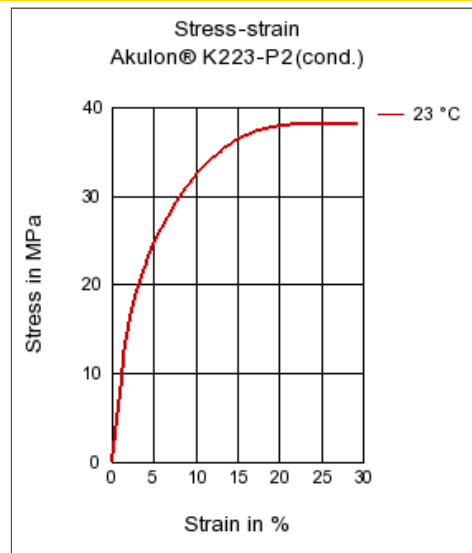
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## Diagrams

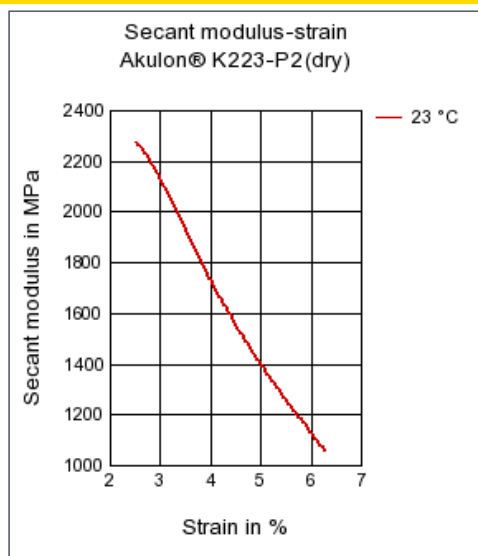
## Stress-strain



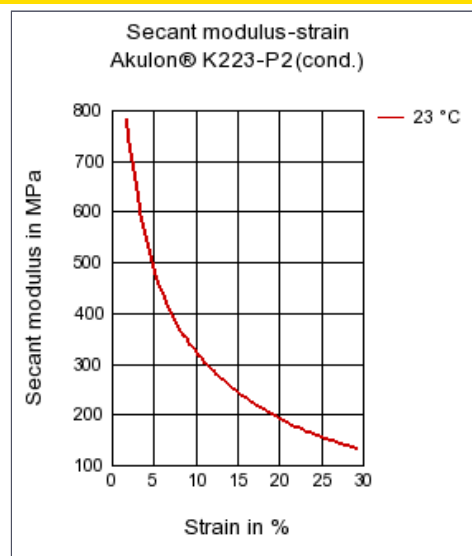
## Stress-strain



## Secant modulus-strain



## Secant modulus-strain



## Characteristics

## Processing

Injection Molding

## Additives

Release agent

## Delivery form

Pellets

## Special Characteristics

High impact or impact modified

## Other text information

## Injection Molding

[Injection Molding Recommendations](#)