

TECHNICAL DATA SHEET

# Akulon® F232-D

Envalior  
PA6

**Processing**

Injection molding

**Delivery Form**

Pellets

**Additives**

Release agent

## Product Text

**Product Information**

High Viscosity

ISO 1043 PA6

Processing/Physical Characteristics	Value	Unit	Standard
Density of melt	960	kg/m <sup>3</sup>	
Thermal conductivity of melt	0.23	W/(m K)	
Spec. heat capacity of melt	2680	J/(kg K)	
Eff. thermal diffusivity	8.82E-8	m <sup>2</sup> /s	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	3300	MPa	ISO 527
Yield stress	85	MPa	ISO 527
Yield strain	4	%	ISO 527
Nominal strain at break	25	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	6	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	4	kJ/m <sup>2</sup>	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	60	°C	ISO 75-1/-2

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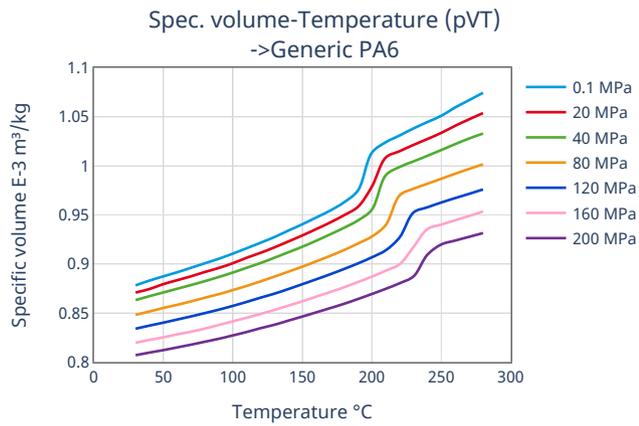
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Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 0.45 MPa	160	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	100	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	140	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	
Yellow card available	yes		
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3	mm	
Yellow card available	yes		
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.9		IEC 62631-2-1
Relative permittivity, 1MHz	3.4		IEC 62631-2-1
Dissipation factor, 100Hz	110	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	220	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E14	Ohm	IEC 62631-3-2
Electric strength	27	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	10	%	Sim. to ISO 62
Humidity absorption	3	%	Sim. to ISO 62
Density	1130	kg/m <sup>3</sup>	ISO 1183
Material Specific Properties	Value	Unit	Standard
Viscosity number	214	cm <sup>3</sup> /g	ISO 307, 1157, 1628

## Diagrams

# Akulon® F232-D

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## Processing Information

### Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding