

TECHNICAL DATA SHEET

Akulon® Ultraflow K-FHG6

Envalior
PA6-GF30

Processing

Injection molding

Delivery Form

Pellets

Special Characteristics

Heat stabilized or stable to heat

Product Text

Product Information

30% Glass Reinforced, Heat Stabilized, High Flow

ISO 1043 PA6-GF30

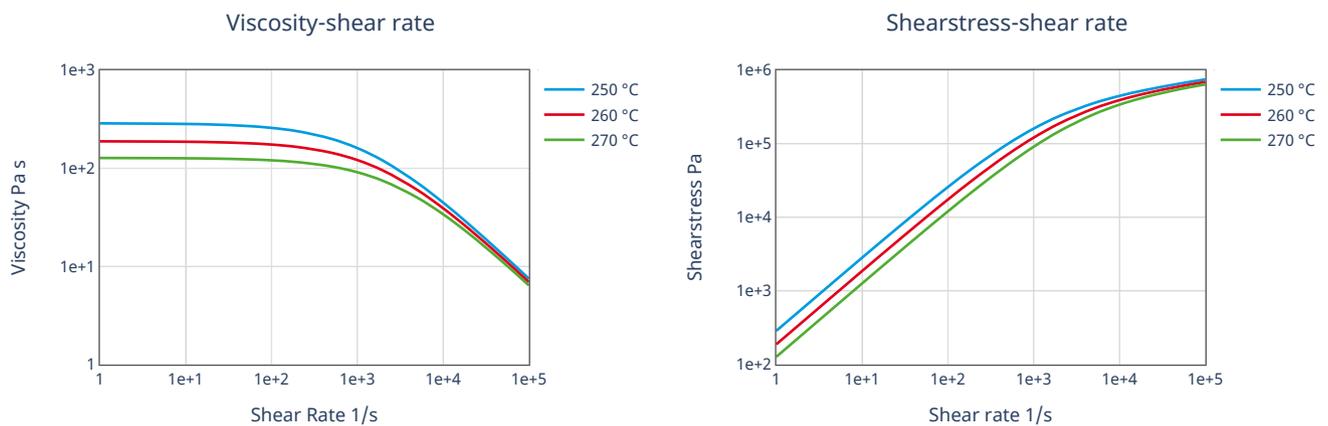
Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	40	cm ³ /10min	ISO 1133
Temperature	275	°C	
Load	2.16	kg	
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1	%	ISO 294-4, 2577
Density of melt	1118	kg/m ³	
Thermal conductivity of melt	0.27	W/(m K)	
Spec. heat capacity of melt	2250	J/(kg K)	
Eff. thermal diffusivity	1.08E-7	m ² /s	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	9500	MPa	ISO 527
Stress at break	175	MPa	ISO 527
Strain at break	3.3	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	85	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	65	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	12.5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	10	kJ/m ²	ISO 179/1eA

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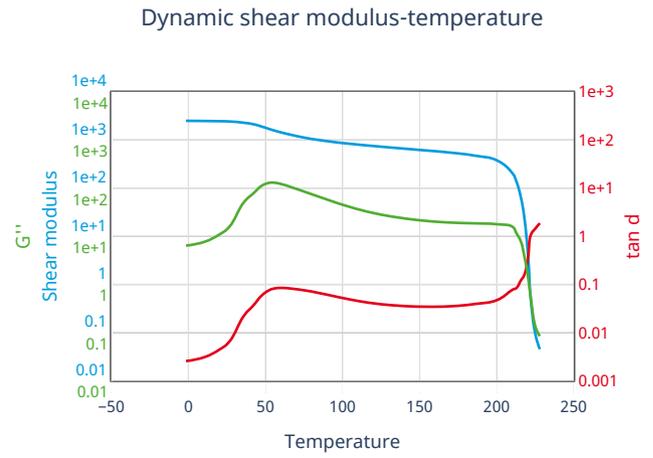
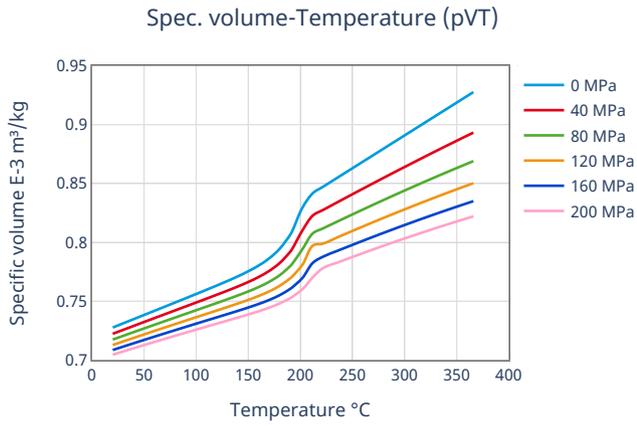
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	200	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	220	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	20	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70	E-6/K	ISO 11359-1/-2
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.5		IEC 62631-2-1
Relative permittivity, 1MHz	3.3		IEC 62631-2-1
Dissipation factor, 100Hz	50	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	150	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E13	Ohm	IEC 62631-3-2
Comparative tracking index	500		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	6	%	Sim. to ISO 62
Humidity absorption	1.8	%	Sim. to ISO 62
Density	1350	kg/m ³	ISO 1183

Diagrams



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Processing Information

Injection molding

Injection Molding Recommendations