

TECHNICAL DATA SHEET

Akulon® S227-C

Envalior
PA66

Processing

Injection molding, Film extrusion, Profile extrusion, Other extrusion

Delivery Form

Pellets

Additives

Lubricants

Certifications

Food contact

Product Text

Product Information

Unreinforced, Medium Viscosity, Lubricated, Food Contact Quality, Extrusion Grade

ISO 1043 PA66

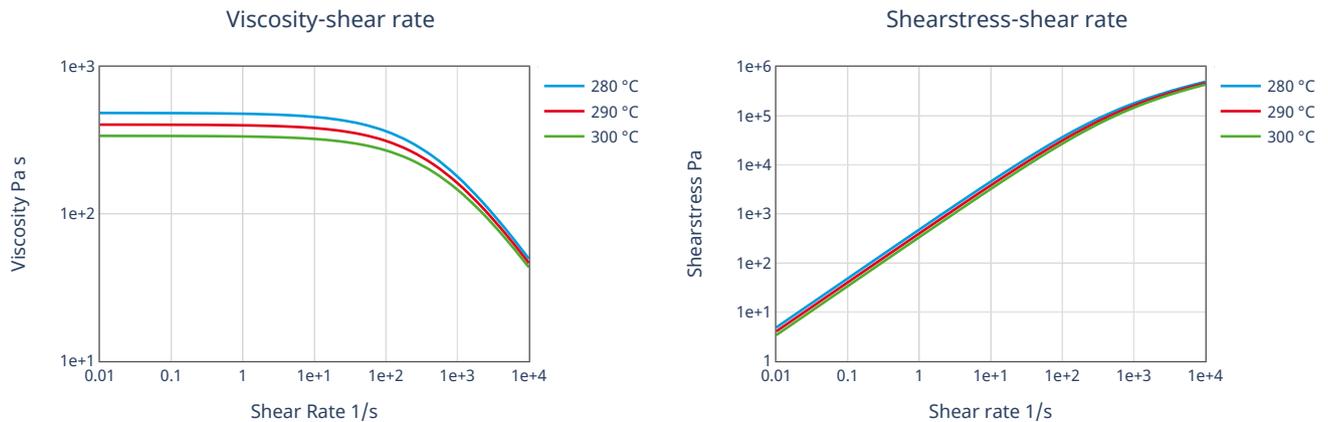
Processing/Physical Characteristics	Value	Unit	Standard
Molding shrinkage, parallel	1.8	%	ISO 294-4, 2577
Molding shrinkage, normal	1.85	%	ISO 294-4, 2577
Mechanical Properties	Value	Unit	Standard
Tensile modulus	3000	MPa	ISO 527
Yield stress	80	MPa	ISO 527
Yield strain	4	%	ISO 527
Nominal strain at break	25	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	260	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	70	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	215	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2

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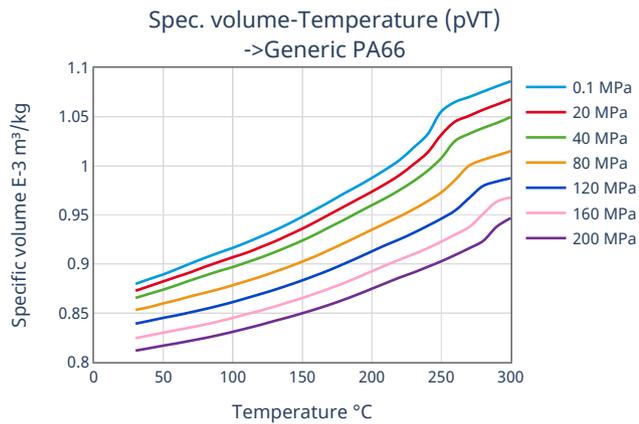
Thermal Properties	Value	Unit	Standard
Coeff. of linear therm. expansion, normal	90	E-6/K	ISO 11359-1/-2
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.4		IEC 62631-2-1
Relative permittivity, 1MHz	3.2		IEC 62631-2-1
Dissipation factor, 100Hz	90	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	220	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Electric strength	25	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	9	%	Sim. to ISO 62
Humidity absorption	2.5	%	Sim. to ISO 62
Density	1140	kg/m ³	ISO 1183
Material Specific Properties	Value	Unit	Standard
Viscosity number	180	cm ³ /g	ISO 307, 1157, 1628

Diagrams



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Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding

Film extrusion

Processing of Akulon® Film Grades