Veradel® A-101
polyethersulfone

Veradel® A polyethersulfone resins offer high heat deflection temperatures, excellent toughness and dimensional stability, and resistance to steam, boiling water, and mineral acids.

Other desirable properties include thermal stability, creep resistance, and inherent flame resistance.

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• North America
Features	• Acid Resistant • Creep Resistant • Flame Retardant • Food Contact Acceptable	• Good Dimensional Stability • Good Thermal Stability • Good Toughness • Steam Resistant
Uses	• Film • Sheet	• Tubing
Agency Ratings	• NSF STD-51	
Forms	• Pellets	
Processing Method	• Extrusion • Film Extrusion	• Sheet Extrusion

Physical	Typical Value	Unit	Test method
Density / Specific Gravity	1.37		ASTM D792
Melt Mass-Flow Rate (MFR) (380°C/2.16 kg)	13	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.60	%	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	2600	MPa	ASTM D638
Tensile Strength	83.0	MPa	ASTM D638
Tensile Elongation (Yield)	6.5	%	ASTM D638
Flexural Modulus	2900	MPa	ASTM D790
Flexural Strength	111	MPa	ASTM D790

Impact	Typical Value	Unit	Test method
Notched Izod Impact	85	J/m	ASTM D256
Tensile Impact Strength	336	kJ/m²	ASTM D1822

Thermal	Typical Value	Unit	Test method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	204	°C	
CLTE - Flow	4.9E-5	cm/cm/°C	ASTM D696
RTI Elec (0.8 mm)	180	°C	UL 746
RTI Imp (0.8 mm)	170	°C	UL 746

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Electrical	Typical Value	Unit	Test method
Volume Resistivity	1.7E+15	ohms·cm	ASTM D257
Dielectric Strength	15	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
60 Hz	3.51		
1 kHz	3.50		
1 MHz	3.54		
Dissipation Factor			ASTM D150
60 Hz	1.7E-3		
1 kHz	2.2E-3		
1 MHz	5.6E-3		

Flammability	Typical Value	Unit	Test method
Flame Rating (0.8 mm)	V-0		UL 94

Extrusion	Typical Value	Unit
Drying Temperature	177	°C
Drying Time	2.5	hr
Cylinder Zone 1 Temp.	327 to 371	°C
Melt Temperature	343 to 390	°C

Notes

Typical properties: these are not to be construed as specifications.

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