

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 1.8 MPa, Unannealed	204	°C	ASTM D648
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

Veradel® A-101

polyethersulfone

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.

www.solvay.com

SpecialtyPolymers.EMEA@solvay.com | Europe, Middle East and Africa

SpecialtyPolymers.Americas@solvay.com | Americas

SpecialtyPolymers.Asia@solvay.com | Asia and Australia

Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

Neither Solvay Specialty Polymers nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this product, related information or its use. Some applications of which Solvay's products may be proposed to be used are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by Solvay's recommendation, including applications of food/feed, water treatment, medical, pharmaceuticals, and personal care. Only products designated as part of the Solviva® family of biomaterials may be considered as candidates for use in implantable medical devices. The user alone must finally determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. The information and the products are for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right.

All trademarks and registered trademarks are property of the companies that comprise the Solvay Group or their respective owners.

© 2017 Solvay Specialty Polymers. All rights reserved.