

## Solvay Specialty Polymers Veradel<sup>®</sup> 3500 Polyethersulfone (PESU)

Category : Polymer , Thermoplastic , Polyethersulfone (PES)

### Material Notes:

Veradel<sup>®</sup> polyethersulfone (PESU) is transparent and offers 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. Veradel<sup>®</sup> 3600 is a very high melt flow grade suggested for compounding, especially of glass or carbon fiber reinforced compounds. Features: Acid Resistant; Flame Retardant; Good Adhesion; Good Chemical Resistance; Good Creep Resistance; Good Dimensional Stability; Good Thermal Stability; Good Toughness; High Flow; High Heat Resistance; High Tensile Strength; Hydrolysis Resistant; Medium Molecular Weight; Medium Rigidity Uses: Compounding Additional Properties: Water Absorption - ASTM D570 1.9

%Information provided by Solvay Specialty Polymers.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Solvay-Specialty-Polymers-Veradel-3500-Polyethersulfone-PESU.php](http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Veradel-3500-Polyethersulfone-PESU.php)

Physical Properties	Metric	English	Comments
Density	1.37 g/cc	0.0495 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.50 % @Time 86400 sec	0.50 % @Time 24.0 hour	ISO 62
Linear Mold Shrinkage, Flow	0.0060 cm/cm	0.0060 in/in	
Melt Flow	58 g/10 min @Load 2.16 kg, Temperature 380 °C	58 g/10 min @Load 4.76 lb, Temperature 716 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength	88.9 MPa	12900 psi	ASTM D638
Elongation at Yield	6.5 %	6.5 %	ASTM D638
Tensile Modulus	2.69 GPa	390 ksi	ASTM D638
Flexural Strength	125 MPa	18100 psi	ASTM D790
Flexural Modulus	2.62 GPa	380 ksi	ASTM D790
Izod Impact, Notched	0.530 J/cm	0.993 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	52.0 µm/m-°C	28.9 µin/in-°F	
Deflection Temperature at 1.8 MPa (264 psi)	200 °C	392 °F	Unannealed; ASTM D648

Thermal Properties	V-0 Metric	V-0 English	Comments
	@Thickness 1.50 mm	@Thickness 0.0591 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.70e+15 ohm-cm	1.70e+15 ohm-cm	ASTM D257
Dielectric Constant	3.5	3.5	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	3.51	3.51	
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	ASTM D150
Dielectric Strength	3.54	3.54	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	15.0 kV/mm	381 kV/in	
Dissipation Factor	0.0017	0.0017	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
	0.0022	0.0022	
	@Frequency 1000 Hz	@Frequency 1000 Hz	ASTM D150
	0.0056	0.0056	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Compliance Properties	Metric	English	Comments
NSF	Yes	Yes	NSF 61

Processing Properties	Metric	English	Comments
Zone 1	335 - 391 Â°C	635 - 736 Â°F	
Zone 2	335 - 391 Â°C	635 - 736 Â°F	
Zone 3	335 - 391 Â°C	635 - 736 Â°F	
Zone 4	335 - 391 Â°C	635 - 736 Â°F	
Zone 5	335 - 391 Â°C	635 - 736 Â°F	
Adapter Temperature	327 - 371 Â°C	621 - 700 Â°F	
Melt Temperature	343 - 385 Â°C	649 - 725 Â°F	

Mold Temperature Processing Properties	149 - 163 Â°C Metric	300 - 325 Â°F English	Comments
Die Cooling Temperature	327 - 371 Â°C	621 - 700 Â°F	
Drying Temperature	177 Â°C	351 Â°F	
	177 Â°C	351 Â°F	
	@Time 9000 sec	@Time 2.50 hour	

Descriptive Properties	Value	Comments
Agency Ratings	NSF 61	
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	Latin America	
	North America	
Color	Transparent - Slight Yellow	
Form	Pellets	
Injection Rate	Fast	
Processing Technique	Compounding; Injection Molding	
RoHS Compliance	RoHS Compliant	
Screw Compression Ratio	2.2:1.0	

## Contact Songhan Plastic Technology Co.,Ltd.

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