

Solvay Specialty Polymers Veradel[®] AG-320 Polyethersulfone (PESU), 20% Glass Fiber

Category : Polymer , Thermoplastic , Polyethersulfone (PES) , Polyethersulfone (PES), 20%Glass Fiber Filled

Material Notes:

Veradel[®] AG-320 is a 20% glass fiber reinforced grade of polyethersulfone (PESU). Adding glass fiber to polyethersulfone substantially increases the rigidity, tensile strength, creep resistance, dimensional stability and chemical resistance of the material, while maintaining most of its other basic characteristics. The combination of structural properties and cost effectiveness make this resin an attractive alternative to metals in many engineering applications. Features: Acid Resistant; Flame Retardant; Food Contact Acceptable; Good Adhesion; Good Chemical Resistance; Good Creep Resistance; Good Dimensional Stability; Good Strength; Good Thermal Stability; Good Toughness; High Heat Resistance; High Rigidity; High Tensile Strength; Hydrolysis Resistant; Medium Flow; Medium Molecular Weight Uses: Appliance Components; Appliances; Automotive Electronics; Batteries; Business Equipment; Electrical Parts; Electrical/Electronic Applications; Food Service Applications; Industrial Applications; Metal Replacement; Microwave Cookware; Plumbing Parts; Valves/Valve Parts Automotive Specifications FORD WSK-M4D773-A2 Color: BK184 Black; FORD WSK-M4D773-A2 Color: NT Natural Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Veradel-AG-320-Polyethersulfone-PESU-20-Glass-Fiber.php

Physical Properties	Metric	English	Comments
Density	1.51 g/cc	0.0546 lb/in ³	ASTM D792
Filler Content	20 %	20 %	Glass Fiber
Water Absorption	0.45 % @Time 86400 sec	0.45 % @Time 24.0 hour	ISO 62
Linear Mold Shrinkage, Flow	0.0040 cm/cm	0.0040 in/in	
Melt Flow	6.0 g/10 min @Load 2.16 kg, Temperature 343 °C	6.0 g/10 min @Load 4.76 lb, Temperature 649 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	109 MPa	15800 psi	ASTM D638
Elongation at Break	3.2 %	3.2 %	ASTM D638
Tensile Modulus	5.69 GPa	825 ksi	ASTM D638
Flexural Strength	162 MPa	23500 psi	ASTM D790
Flexural Modulus	6.55 GPa	950 ksi	ASTM D790
Izod Impact, Notched	0.590 J/cm	1.11 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	31.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	17.2 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	
	@Thickness 3.18 mm	@Thickness 0.125 in	
Deflection Temperature at 1.8 MPa (264 psi)	214 $\text{Å}^\circ\text{C}$	417 $\text{Å}^\circ\text{F}$	Unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	
Flammability, UL94	V-0	V-0	
	@Thickness 0.787 mm	@Thickness 0.0310 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00\text{e}+16$ ohm-cm	$\geq 1.00\text{e}+16$ ohm-cm	ASTM D257
Dielectric Constant	3.84	3.84	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
	3.84	3.84	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	3.88	3.88	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	17.0 kV/mm	432 kV/in	ASTM D149
Dissipation Factor	0.0015	0.0015	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
	0.0018	0.0018	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	0.0081	0.0081	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Compliance Properties	Metric	English	Comments
NSF	Yes	Yes	NSF 51

Processing Properties	Metric	English	Comments
Melt Temperature	343 - 399 $\text{Å}^\circ\text{C}$	649 - 750 $\text{Å}^\circ\text{F}$	
Mold Temperature	149 - 163 $\text{Å}^\circ\text{C}$	300 - 325 $\text{Å}^\circ\text{F}$	
	149 - 177 $\text{Å}^\circ\text{C}$		

Processing Properties	Metric	300 - 351 A°F English	Comments
	@Time 9000 - 14400 sec	@Time 2.50 - 4.00 hour	
Back Pressure	0.345 - 0.689 MPa	50.0 - 99.9 psi	

Descriptive Properties	Value	Comments
Agency Ratings	NSF 51	
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	Latin America	
	North America	
Color	Colors Available; Natural	
Form	Pellets	
Injection Rate	Fast	
Processing Technique	Injection Molding	
RoHS Compliance	RoHS Compliant	
Screw Compression Ratio	2.0:1.0	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China