Veradel® 3320GF
polyethersulfone

Veradel® 3320GF 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. Veradel® 3320GF is an opaque, grayish material in its natural form and can be readily colored.

This grade was formerly marketed as Gafone™ PESU.

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight	
Features	• Acid Resistant • Creep Resistant • Flame Retardant • Good Adhesion • Good Dimensional Stability	• High Rigidity • High Tensile Strength • Hydrolysis Resistant • Medium Flow • Medium Molecular Weight
Uses	• Metal Replacement	
RoHS Compliance	• RoHS Compliant	
Appearance	• Colors Available	• Opaque
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Typical Value	Unit	Test method
Density / Specific Gravity	1.49		ASTM D792
Molding Shrinkage - Flow	0.30	%	ASTM D955
Water Absorption (24 hr)	0.50	%	ASTM D570

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	7000	MPa	ASTM D638
Tensile Strength	120	MPa	ASTM D638
Tensile Elongation (Break)	2.8	%	ASTM D638
Flexural Modulus	6500	MPa	ASTM D790
Flexural Strength	170	MPa	ASTM D790

Impact	Typical Value	Unit	Test method
Notched Izod Impact	70	J/m	ASTM D256

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Thermal	Typical Value	Unit	Test method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Annealed	210	°C	
Continuous Use Temperature [1]	190	°C	ASTM D794
CLTE - Flow	2.5E-5	cm/cm/°C	ASTM D696

Electrical	Typical Value	Unit	Test method
Surface Resistivity	1.0E+14	ohms	ASTM D257
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	20	kV/mm	ASTM D149
Arc Resistance	110	sec	ASTM D495
Comparative Tracking Index (CTI)	150	V	UL 746A

Flammability	Typical Value	Unit	Test method
Flame Rating (0.8 mm)	V-0		UL 94
Oxygen Index	42	%	ASTM D2863

Additional Information

1. These properties has been determined from injection molded test specimen under ideal processing parameters and conditioned at 23+/- 2°C and 50%RH.

Injection	Typical Value	Unit
Drying Temperature	150	°C
Drying Time	3.0	hr
Processing (Melt) Temp	340 to 380	°C
Mold Temperature	120 to 160	°C
Screw Speed	20 to 50	rpm

Extrusion	Typical Value	Unit
Die Temperature	300 to 320	°C

Notes

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

[1] Expected value.

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