

Edgetek™ AT-15CF/000 BLACK

PolyOne Corporation - Acetal (POM) Copolymer

12/17/2009

General Information

Product Description

The Edgetek® Engineering Thermoplastic Compounds portfolio covers a broad range of standard and custom-formulated high performance materials. This portfolio includes high-temperature materials for elevated service temperature environments, high-modulus / structural materials for load-bearing and high-strength applications and flame-retardant products. These compounds are based on select engineering thermoplastic resins that are compounded with reinforcing additives such as carbon fiber, glass fiber and glass beads.

Seneral			
Material Status	Commercial: Active		
Regional Availability	Africa & Middle EastAsia Pacific	EuropeNorth America	South America
Filler / Reinforcement	Carbon Fiber Reinforcement, 15% Filler by Weight		
Features	CopolymerElectrically Conductive	Good Wear ResistanceSemi Crystalline	
Uses	Automotive ApplicationsBusiness Equipment	Electrical/Electronic ApplicationsIndustrial Applications	Printer Parts
RoHS Compliance	 RoHS Compliant 		
Forms	Pellets		

ASTM & ISO Properties ¹				
Physical	Nominal Value Unit	Test Method		
Specific Gravity	1.44	ASTM D792		
Molding Shrinkage - Flow (0.125 in)	0.0010 to 0.0050 in/in	ASTM D955		
Molding Shrinkage - Across Flow (0.125 in)	0.010 to 0.030 in/in	ASTM D955		
Mechanical	Nominal Value Unit	Test Method		
Tensile Modulus ²	1.75E+6 psi	ASTM D638		
Tensile Strength ² (Break)	11700 psi	ASTM D638		
Tensile Elongation ³ (Break)	1.0 to 2.0 %	ASTM D638		
Flexural Modulus ⁴	1.27E+6 psi	ASTM D790		
Flexural Strength ⁴	14000 psi	ASTM D790		
Impact	Nominal Value Unit	Test Method		
Notched Izod Impact (Injection Molded)	0.600 ft·lb/in	ASTM D256		
Thermal	Nominal Value Unit	Test Method		
Deflection Temperature Under Load (66 psi, Unannealed)	325 °F	ASTM D648		
Deflection Temperature Under Load		ASTM D648		
264 psi, Unannealed	307 °F			
Electrical	Nominal Value Unit	Test Method		
Surface Resistivity	1.0E+2 to 1.0E+4 ohms	ASTM D257		
Volume Resistivity	1.0E+2 to 1.0E+4 ohm·cm	ASTM D257		

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 0.20 in/min
- ³ Type I
- 4 0.050 in/min

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