Edgetek™ AS-10GF/000 NATURAL

Acrylonitrile Butadiene Styrene

Key Characteristics

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.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Features	• Amorphous	• Good Moldability	• Good Toughness
Uses	• Appliances • Automotive Applications	• Consumer Applications • General Purpose	• Industrial Applications • Structural Parts
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.11	1.11	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3 in/in	0.20 to 0.40 %	ASTM D955
Molding Shrinkage - Across Flow	7.5E-3 to 0.010 in/in	0.75 to 1.0 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	598000 psi	4120 MPa	ASTM D638
Tensile Strength [2] (Break)	8600 psi	59.3 MPa	ASTM D638
Tensile Elongation (Break)	2.0 to 3.0 %	2.0 to 3.0 %	ASTM D638
Flexural Modulus [3]	550000 psi	3790 MPa	ASTM D790
Flexural Strength [3]	13600 psi	93.8 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact	1.4 ft·lb/in	75 J/m	ASTM D256
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	212 °F	100 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	196 °F	91.0 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	190 °F	87.8 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.010 to 0.15 %	0.010 to 0.15 %
Rear Temperature	400 to 475 °F	204 to 246 °C
Middle Temperature	400 to 475 °F	204 to 246 °C
Front Temperature	400 to 475 °F	204 to 246 °C

Injection	Typical Value (English)	Typical Value (SI)
Nozzle Temperature	420 to 500 °F	216 to 260 °C
Mold Temperature	140 to 200 °F	60.0 to 93.3 °C

Notes

[1] Typical values are not to be construed as specifications.

[2] 0.20 in/min (5.1 mm/min)

[3] 0.050 in/min (1.3 mm/min)

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