



## Edgetek™ AT-1000

### Acetal (POM) Copolymer

#### 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	• Europe	
	• Asia Pacific	• Latin America	
Features	• Copolymer	• General Purpose	
Uses	• Automotive Applications	• Consumer Applications	• Industrial Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

#### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.41	1.41	ASTM D792
Molding Shrinkage - Flow	0.020 to 0.022 in/in	2.0 to 2.2 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.20 %	0.20 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	435000 psi	3000 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	8800 psi	60.7 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	8.0 to 10 %	8.0 to 10 %	ASTM D638
Flexural Modulus	365000 psi	2520 MPa	ASTM D790
Flexural Strength	13000 psi	89.6 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.3 ft-lb/in	69 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	230 °F	110 °C	

#### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	400 to 440 °F	204 to 227 °C

#### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

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