



## Edgetek™ ET6500-5006 natural Polyamide 6 Alloy

### 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	• Europe
Uses	• General Purpose
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Injection Molding

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density (73°F (23°C))	1.13 g/cm <sup>3</sup>	1.13 g/cm <sup>3</sup>	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus			ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	392000 psi	2700 MPa	
Tensile Stress			ISO 527-2/50
Yield, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	11000 psi	76.0 MPa	
Tensile Strain			ISO 527-2
Yield, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	> 4.0 %	> 4.0 %	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	> 1.9 ft·lb/in <sup>2</sup>	> 4.0 kJ/m <sup>2</sup>	
73°F (23°C)	3.6 ft·lb/in <sup>2</sup>	7.5 kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	No Break	No Break	
73°F (23°C)	No Break	No Break	

#### Notes

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