



Edgetek™ ET6000-5008 NHFR BLACK VN-3901

Polyamide 6

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
Forms	• Pellets

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ² (73°F (23°C))	1.19 g/cm ³	1.19 g/cm ³	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	493000 psi	3400 MPa	ISO 527-2/1
Tensile Stress Break, 73°F (23°C), 0.157 in (4.00 mm)	10200 psi	70.0 MPa	ISO 527-2/5
Tensile Strain Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	3.0 %	3.0 %	ISO 527-2/5
Flexural Modulus	464000 psi	3200 MPa	ISO 178
Flexural Stress	16000 psi	110 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength 73°F (23°C), Injection Molded	> 1.4 ft·lb/in ²	> 3.0 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C), Injection Molded	20 ft·lb/in ²	42 kJ/m ²	ISO 179
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Comparative Tracking Index	550 V	550 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.13 in (3.2 mm))	V-0	V-0	UL 94
Glow Wire Flammability Index 0.13 in (3.2 mm)	1760 °F	960 °C	IEC 60695-2-12

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C

Notes

¹ Typical values are not to be construed as specifications.

² ± 0.03
