

# 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

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density <sup>2</sup> (73°F (23°C))	1.19 g/cm³	1.19 g/cm³	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	493000 psi	3400 MPa	
Tensile Stress			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm)	10200 psi	70.0 MPa	
Tensile Strain			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	3.0 %	3.0 %	
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			ISO 179
73°F (23°C), Injection Molded	> 1.4 ft·lb/in²	> 3.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C), Injection Molded	20 ft·lb/in²	42 kJ/m²	
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			IEC 60695-2-12
0.13 in (3.2 mm)	1760 °F	960 °C	

## **Processing Information**

Injection	Typical Value (English)	Typical Value (SI)	
Drying Temperature	176 °F	80.0 °C	
Drying Time	4.0 hr	4.0 hr	
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C	

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#### **Notes**

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

 $^{2}$  ±0.03

#### **CONTACT INFORMATION**

Americas

United States - Avon Lake +1 440 930 1000

United States - McHenry +1 815 385 8500

China - Guangzhou +86 20 8732 7260

China - Shenzhen +86 755 2969 2888

China - Suzhou +86 512 6823 24 38

China - Suzhou +86 512 6265 2600 Hong Kong -+852 2690 5332

Taiwan - Yonghe City, +886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau +49 7225 6802 0

Spain - Barbastro (Huesca) +34 974 310 314

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Better Business Solutions. SM

www.polyone.com

**PolyOne Americas** 

33587 Walker Road Avon Lake, Ohio 44012 **United States** 

+1 440 930 1000

+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road Z.J Hi-tech Park, Pudong Shanghai, 201203, China +86 21 5080 1188

PolyOne Europe

6 Giällewee

+352 269 050 35

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