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/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

Notes

[1] 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

Asia

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

Beyond Polymers.

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