Edgetek™ ET6000-5011 NHFR X1 WHITE

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))	1.49 g/cm³	1.49 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	1.02E+6 psi	7000 MPa	
Tensile Stress			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm)	13100 psi	90.0 MPa	
Tensile Strain			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	> 2.0 %	> 2.0 %	
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179
73°F (23°C), Injection Molded	1.9 ft·lb/in²	4.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C), Injection Molded	15 ft·lb/in²	32 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			UL 94
0.031 in (0.8 mm)	V-2	V-2	
0.06 in (1.6 mm)	V-2	V-2	
0.13 in (3.2 mm)	V-2	V-2	
Glow Wire Flammability Index			IEC 60695-2-12
0.031 in (0.8 mm)	1760 °F	960 °C	
0.06 in (1.6 mm)	1760 °F	960 °C	
0.13 in (3.2 mm)	1760 °F	960 °C	

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