



## Edgetek™ AM-35GF/000 FR NH

### Polyphthalamide

#### 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
Filler / Reinforcement	• Glass Fiber Reinforcement, 35% Filler by Weight
Features	• Flame Retardant • Halogen Free
Uses	• Automotive Applications • General Purpose • Electrical/Electronic Applications • Industrial Applications
Forms	• Pellets
Processing Method	• Injection Molding

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.51 g/cm <sup>3</sup>	1.51 g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow: 0.0787 in (2.00 mm)	0.70 %	0.70 %	
Flow: 0.0787 in (2.00 mm)	0.10 %	0.10 %	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.81E+6 psi	12500 MPa	ISO 527-2
Tensile Stress (Break)	21800 psi	150 MPa	ISO 527-2
Tensile Strain (Break)	2.0 %	2.0 %	ISO 527-2
Flexural Modulus	1.45E+6 psi	10000 MPa	ISO 178
Flexural Strength	30500 psi	210 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.9 ft·lb/in <sup>2</sup>	6.0 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	24 ft·lb/in <sup>2</sup>	50 kJ/m <sup>2</sup>	ISO 179/1eU
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 264 psi (1.8 MPa), Annealed	536 °F	280 °C	ISO 75-2/A
Melting Temperature	608 to 626 °F	320 to 330 °C	ISO 11357-3
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Comparative Tracking Index	600 V	600 V	IEC 60112

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Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.0315 in (0.800 mm)	V-0	V-0	
0.0630 in (1.60 mm)	V-0	V-0	
0.118 in (3.00 mm)	V-0	V-0	
Glow Wire Flammability Index			IEC 60695-2-12
0.0315 in (0.800 mm)	1760 °F	960 °C	
0.0630 in (1.60 mm)	1760 °F	960 °C	
0.118 in (3.00 mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.0315 in (0.800 mm)	1380 °F	750 °C	
0.0630 in (1.60 mm)	1380 °F	750 °C	
0.118 in (3.00 mm)	1430 °F	775 °C	
Oxygen Index	> 34 %	> 34 %	ISO 4589-2

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time	4.0 hr	4.0 hr
Suggested Max Moisture	< 0.10 %	< 0.10 %
Processing (Melt) Temp	608 to 644 °F	320 to 340 °C
Mold Temperature	194 to 248 °F	90.0 to 120 °C

### Notes

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

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