



## Edgetek™ PI-30GF/000

### Polyether Imide

#### 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	• Africa & Middle East	• Europe
	• Asia Pacific	• Latin America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Features	• General Purpose	• High Heat Resistance
Uses	• Automotive Applications	• General Purpose
	• Consumer Applications	• Industrial Applications
Forms	• Pellets	
Processing Method	• Injection Molding	

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.49	1.49	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3 in/in	0.20 to 0.30 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.18 %	0.18 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	1.30E+6 psi	8960 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	25000 psi	172 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	4.0 to 5.0 %	4.0 to 5.0 %	ASTM D638
Flexural Modulus	1.30E+6 psi	8960 MPa	ASTM D790
Flexural Strength	32000 psi	221 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.7 ft-lb/in	91 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	410 °F	210 °C	

#### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	680 to 750 °F	360 to 399 °C

#### Notes

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

<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

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**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



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[www.polyone.com](http://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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