



Edgetek™ PF-20CF/000

Polysulfone

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 • Asia Pacific	• Europe • North America	• South America
Filler / Reinforcement	• Carbon Fiber Reinforcement, 20% Filler by Weight		
Features	• General Purpose	• High Heat Resistance	
Uses	• Automotive Applications • Consumer Applications	• General Purpose • Industrial Applications	
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.31	1.31	ASTM D792
Molding Shrinkage - Flow	0.0010 to in/in 0.0020	0.10 to 0.20 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.20 %	0.20 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	1.60E+6 psi	11000 MPa	ASTM D638
Tensile Strength ² (Yield)	18500 psi	128 MPa	ASTM D638
Tensile Elongation ² (Break)	2.0 to 4.0 %	2.0 to 4.0 %	ASTM D638
Flexural Modulus	1.60E+6 psi	11000 MPa	ASTM D790
Flexural Strength	22500 psi	155 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	1.60 ft-lb/in	85.4 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)	355 °F	179 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	670 to 710 °F	354 to 377 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

Copyright ©, 2008 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

CONTACT INFORMATION

Americas

Argentina - Buenos Aires
+0054 11 4200 5917

Brasil - Campinas
+55 19 3206 0561

Mexico - Toluca
+52 722 2790200

United States - Avon Lake
+1 440 930 1000

United States - Seabrook
+1 281 474 2831

Asia

China - Shenzhen
+86 (0) 755 2969 2888

China - Suzhou
+86 (0) 512 6823 24 38

India - Mumbai
+91 9820 194 220

Singapore - Singapore
+65 (0) 6861 9325

Europe

Germany - Gaggenau
+49 (0) 7225 6802 0

Spain - Barbastro (Huesca)
+34 (0) 9 7431 0314

Turkey - Cekmece-Istanbul-Türkiye
+90 (0) 212 549 2256

United Kingdom - Widnes
+44 (0) 05600 760 800



Beyond Polymers.

Better Business Solutions.™

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 (0) 21 5080 1188

PolyOne Europe

2 Rue Melville Wilson
5330 Assesse, Belgium
+32 (0) 83 660 211