



Edgetek™ PC-15CF/000 FCR Polycarbonate

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 • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 15% Filler by Weight		
Features	• Fast Molding Cycle		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.26	1.26	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 2.0E-3 in/in	0.10 to 0.20 %	ASTM D955
Water Absorption (24 hr)	0.15 %	0.15 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	1.00E+6 psi	6890 MPa	ASTM D638
Tensile Strength ² (Break)	16500 psi	114 MPa	ASTM D638
Tensile Elongation ² (Break)	3.0 %	3.0 %	ASTM D638
Flexural Modulus	1.00E+6 psi	6890 MPa	ASTM D790
Flexural Strength	25000 psi	172 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.5 ft-lb/in	80 J/m	ASTM D256A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	300 °F	149 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	290 °F	143 °C	ASTM D648
CLTE - Flow	8.0E-6 in/in/°F	1.4E-5 cm/cm/°C	ASTM D696
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+2 to 1.0E+5 ohms	1.0E+2 to 1.0E+5 ohms	ASTM D257
Volume Resistivity	1.0E+2 to 1.0E+5 ohms·cm	1.0E+2 to 1.0E+5 ohms·cm	ASTM D257
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	HB	HB	UL 94

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	250 °F	121 °C
Drying Time	2.0 hr	2.0 hr
Processing (Melt) Temp	550 to 610 °F	288 to 321 °C
Mold Temperature	180 to 225 °F	82.2 to 107 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

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.™

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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