Technical Data Sheet

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 • North America	• South America
Filler / Reinforcement	• Carbon Fiber Reinforcement, 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 g/cm³	ASTM D792
Molding Shrinkage - Flow	0.0010 to 0.0020 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			ASTM D256A
73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.5 ft·lb/in	80 J/m	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	300 °F	149 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	290 °F	143 °C	
CLTE - Flow	8.0E-6 in/in/°F	0.000014 cm/cm/°C	ASTM D696
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Surface Resistivity	1.0E+2 to 1.0E+5 ohm	1.0E+2 to 1.0E+5 ohm	ASTM D257
Volume Resistivity	1.0E+2 to 1.0E+5 ohm·cm	1.0E+2 to 1.0E+5 ohm·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)

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