



Stat-Tech™ PC-CB2/000 CR

Polycarbonate

Key Characteristics

Product Description	
Stat-Tech™ PC-CB2/000 CR XP100827	
General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Carbon Nano
Features	• Clean/High Purity • Electrically Conductive
Uses	• Aerospace Applications • Computer Components • Electrical/Electronic Applications • Automotive Electronics • Connectors • Business Equipment • Electrical Housing • Housings
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.19 to 1.23	1.19 to 1.23	ASTM D792
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3 in/in	0.50 to 0.70 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	300000 to 500000 psi	2070 to 3450 MPa	ASTM D638
Tensile Strength ² (Yield)	8000 to 10500 psi	55.2 to 72.4 MPa	ASTM D638
Tensile Elongation ² (Break)	3.0 to 7.0 %	3.0 to 7.0 %	ASTM D638
Flexural Modulus	250000 to 450000 psi	1720 to 3100 MPa	ASTM D790
Flexural Strength	13000 to 15000 psi	89.6 to 103 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	0.70 to 1.0 ft·lb/in	37 to 53 J/m	ASTM D256A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	253 °F	123 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	234 °F	112 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+3 to 1.0E+5 ohms	1.0E+3 to 1.0E+5 ohms	ASTM D257
Volume Resistivity	1.0E+2 to 1.0E+4 ohms·cm	1.0E+2 to 1.0E+4 ohms·cm	ASTM D257

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	248 to 266 °F	120 to 130 °C

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Injection	Typical Value (English)	Typical Value (SI)
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	572 to 608 °F	300 to 320 °C
Mold Temperature	194 to 230 °F	90.0 to 110 °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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