



碳元素(厦门)新材料有限公司

Carbon (Xiamen) New Materials Co., Ltd

基本信息 / Basic Information

产品名称	Name:	PP-CF-BCA5
树脂类型	Resin Type:	聚丙烯 Polypropylene
纤维类型	Fiber Type:	碳纤维 Carbon Fiber
纤维含量	Fibe Content:	50% 碳纤维 50% Carbon Fiber
颜 色	Color :	黑色 Black
材料特性	Ateriaaaterialproperties:	超高强度与刚性、尺寸稳定性、耐化学性、导电与导热性 Ultra-high strength and rigidity, dimensional stability, chemical resistance, electrical and thermal conductivity

材料参数 / Material Parameters

物理性能 Physical Properties	典型性能 Typical Characteristic	测试标准 Testing Standard
密 度 Density	1.15 g/cm ³	ISO 1183
吸 水 率 Molding Shrinkage	0.20 %	ISO 2008
成 型 收 缩 率 Molding Shrinkage	0.37 %	ISO 2001
熔体流动速率 Melt Flow	1.16 g/10min	ISO 3682
机械性能 Mechanical Properties	典型性能 Typical Characteristic	测试标准 Testing Standard
拉 伸 模 量Tensile Modulus	17891.0 Mpa	ISO 527
拉 伸 强 度 Tensile Strength	57.7 Mpa	ISO 527
拉 伸 伸 长 率 Tensile Elongation	0.48 %	ISO 527
弯 曲 强 度Flexural Strength	58.8 Mpa	ISO 178
弯 曲 模 量Flexural Modulus	8592.1 Mpa	ISO 178

此数据表格中的数值信息仅供参考，不承担任何法律责任，针对数值有疑问的地方，请联系我们。



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冲击性能 Impact Performance	典型性能 Typical Characteristic	测试标准 Testing Standard
悬臂梁缺口冲击强度 Izod Notched Impact Strength	4.85 KJ/m ²	ISO 179
悬臂梁无缺口冲击强度 Notched Impact Strength Of Cantilever Beam	35.2 KJ/m ²	ISO 179
电性能 Electrical	典型性能 Typical Characteristic	测试标准 Testing Standard
表面电阻 Surface Resistivity	< E2 Ω	ISO 3915-2022
热性能 Thermal performance	典型性能 Typical Characteristic	测试标准 Testing Standard
热变形温度 Heat Deflection Temperature	180 - 185 °C	ISO 1634
熔 融 温 度 Melting Point	230 - 268 °C	ISO 3146
燃 烧 性 能 Combustion Performance	HB	UL 94
加工处理 Processing and Handling	典型性能 Typical Characteristic	测试标准 Testing Standard
注射压力 Injection Pressure	110 - 140 MPa	
熔体温度 Melt Temperature	230 - 268 °C	
模具温度 Mold Temperature	80 - 95 °C	
干燥温度 Drying Temperature	100 - 110 °C	
干燥时间 & 干燥含水量 Drying Time & Drying Water Content	3 - 5 h & < 0.05 %	

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材料简介/Material Introduction

碳纤维是一种高性能增强的复合材料，具有耐高温、抗摩擦、导电、导热及耐腐蚀等特性，

碳纤维的性能取决于其原料及制造过程，生产的产品适用于注塑，压缩和挤出成型的应用。

碳纤维增强复合材料可用航空航天、汽车、体育、建筑、机械、电子电器等领域的应用还将不断扩大。

Carbon fiber is a high-performance reinforced composite material with characteristics of high temperature resistance, anti-friction, electricity conductivity, heat conductivity and corrosion processes, resistance. The performance of carbon fiber depends on its raw materials and manufacturing and the products are suitable for applications of injection molding, compression molding, and extrusion molding. The application of carbon fiber reinforced composite materials in aerospace, automobile, sports, machinery, electronics and electrical equipment and other fields will continue to expand.

注意事项/Precautions and Considerations

使用本材料时，应注意避免过度加热或过度剪切，以免损坏材料的性能，选择适合碳纤维的注塑机，压力、注射速度、模具温度等参数应根据碳纤维材料的特性进行调整，碳纤维材料特性，注塑机在使用过程中可能会受到较大的磨损，腐蚀。因此，应定期对机台进行维护保养、确保机台的正常运行和使用寿命。

When using this material, it is important to avoid excessive heating or shearing to prevent damage to the material's properties. It is necessary to select an injection molding machine suitable for carbon fiber, and the parameters such as pressure, injection speed, and mold temperature should be adjusted to the characteristics of the carbon fiber material. The carbon fiber material has unique properties, and according to the injection molding machine may suffer from significant wear and corrosion during use. Therefore, regular maintenance of the machine should be conducted to ensure its normal operation and service life.

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