



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-BCA15
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:	15% 碳纤维 15% Carbon Fiber
颜色	Color :	黑色 Black
材料特性	Ateriaaterialproperties:	高刚性、尺寸稳定性、优异的耐磨性、高耐热性 High rigidity, dimensional stability, excellent wear resistance, high heat resistance

材料参数 / Material Parameters

物理性能	典型性能	测试标准
Physical Properties	Typical Characteristic	Testing Standard
密度	0.98 g/cm ³	ISO 1183
Density		
吸水率	0.25 %	ISO 2008
Water Absorption		
成型收缩率	1.25 %	ISO 2001
Molding Shrinkage		
熔体流动速率	4.4 g/10min	ISO 3682
Melt Flow		
机械性能	典型性能	测试标准
Mechanical Properties	Typical Characteristic	Testing Standard
拉伸模量Tensile Modulus	13077.2 Mpa	ISO 527
拉伸强度	52.6 Mpa	ISO 527
Tensile Strength		
拉伸伸长率	2.1 %	ISO 527
Tensile Elongation		
弯曲强度Flexural Strength	65.5 Mpa	ISO 178
弯曲模量Flexural Modulus	6890.1 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

5.7 KJ/m²

ISO 179

悬臂梁无缺口冲击强度
Notched Impact Strength Of
Cantilever Beam

43 KJ/m²

ISO 179

电性能

Electrical

典型性能

Typical Characteristic

测试标准

Testing Standard

表面电阻
Surface Resistivity

E3 - E6 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

160 - 165 °C

ISO 1634

熔 融 温 度
Melting Point

200 - 220 °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

75 - 90 MPa

熔体温度
Melt Temperature

200 - 220 °C

模具温度
Mold Temperature

50 - 70 °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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