

Technical Data Sheet BF3002HT Injection Molding Resin 技术数据表BF3002HT

注塑成型树脂

Product Description产品描述

Natur-TecTM BF3002HT is a bio-based and biodegradable polymer resin made with IngeoTM. It is a two-part system comprised of a blend of Natur-Tec's highly filled masterbatch and virgin IngeoTM. A key advantage of this blend is that only 50% of the resin used for molding goes through two heat histories, which in turn, helps in maintaining the molecular weight, and therefore results in improved mechanical strength for the final part, as compared to a part manufactured with the 100% fully-compounded resin.

Natur-TecTM BF3002HT is manufactured using sustainable and renewable resources, per the ASTM D6866 standard, which allows industry and consumers the opportunity to reduce or neutralize their carbon footprint. Natur-Tec resins are engineered for high performance. Shrinkage of BF3002HT is similar to that of polystyrene and as such, it is easily processable on equipment designed for polystyrene material. Natur-Tec BF3002HT is designed to meet requirements of international standards for compostable plastics such as ASTM D6400 (U.S.) and EN13432. Please refer to the Material Safety Data Sheet and the Processing Guide for specific handling and processing instructions.

Natur-Tec TM BF3002HT是一种以IngeoTM为原料制备的生物基和可生物降解的聚合树脂。它包含两个部分,由Natur-TecTM的高填充母料和virgin IngeoTM混合而成。这种混合物的一个关键优点是,与100%完全复合树脂相比,用于注塑的树脂中只有50%经历过两次热处理,这有助于保持分子量,从而提高最终零件的机械强度。

Natur-Tec ™ BF3002HT根据ASTM D6866标准,采用可持续和可再生材料制造,使得行业和消费者有机会减少或中和其碳足迹。Natur-Tec树脂的设计宗旨是高性能。BF3002HT的收缩率与聚苯乙烯的收缩率相似,因此在聚苯乙烯材料的设备上易于加工。Natur Tec BF3002HT设计满足可堆肥塑料的国际标准要求,如ASTM D6400(美国)和EN13432等。具体操作和加工说明请参阅材料安全数据表和加工指南。

Applications应用

Natur-Tec® BF3002HT can be used for injection molded plastic applications such as making cutlery, pens, hangers, containers and packaging.

Natur-Tec®BF3002HT可用于注塑塑料的应用领域,如制作餐具、钢笔、衣架、容器和包装。

Properties性质

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Property 性质	Unit 单位	Test Method 测试方法	Value值			
Specific Gravity比重	g/cm³	ASTM D792	1.4 – 1.5			
** Melt Flow Rate MFR 190°C, 2.16 kg **熔体流动速率 190°C, 2.16 kg	g/10 min	ASTM D1238	5 – 8			
Molding Shrinkage成型收缩率	%	ASTM D955	轴向Axial: 0.2 – 0.3 侧向Lateral: < 0.1			
Mechanical Properties* 机械性质*						
Property性质	Unit单	Test Method测量方法	Value信			

	位		
Tensile Strength抗张强度	MPa	ASTM D638	64
Elongation延伸率	%	ASTM D638	7
Flexural Strength抗弯强度	MPa	ASTM D790	108
Notched Izod Impact Strength 缺口冲去强度	J/m	ASTM D256	8.7

Thermal Properties*热

Property性质	Unit单 位	Test Method测试方法	Value值		
Heat Deflection Temperature (Un-annealed) 热变形温度(未退火)	°C	ASTM D648	60		
Heat Deflection Temperature (Annealed) 热变形温度(退火)	°C	ASTM D648	125		

^{*} Data obtained from annealed standard test bars molded with 50/50 blend of Natur-Tec ® BM3002HT masterbatch and Ingeo™ 3001D.

Note

The property values listed above are calculated under standard temperature and humidity conditions. These property values should be viewed as guidelines only, and may vary based on processing conditions. No warranties of any kind, either expressed or implied are made regarding products described or regarding designs, data or information set forth.

上述属性值是在标准温度和湿度条件下计算的。这些属性值应仅视为参考标准,并可能根据处理条件而有所不同。对于所描述的产品或所述的设计、数据或信息,不作任何形式的明示或默示保证。

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^{*}从用50: 50 Natur-Tec®BM3002HT母料和Ingeo™ 3001D混合模制的标准测试棒退火前后获得的数据。

^{**} MFR determined from a 50/50 blend of Natur-Tec ® BM3002HT masterbatch and Ingeo™ 3001D.

^{**}熔体流动速率通过Natur-Tec BM3002HT母料和Ingeo™ 3001D的50: 50混合物测定。