Natur-Tec™
Sustainable Biobased Materials

Natur-Tec BF3002HT

High Performance Compounds for High Heat Service Ware

Natur-Tec BF3002HT Product Features

- Natur-Tec BF3002HT is obtained by letting down highly-filled masterbatch into Ingeo™ grade PLA resins to tailor performance properties
- Engineered specifically for high heat resistance applications such as cutlery and food service
- Natur-Tec BF3002HT is 100% compostable and meets requirements of ASTM D6400 and EN13432
- Increased dimensional stability in annealing processes reduces production scrap
- Innovative masterbatching approach maintains molecular weight of the resin compound, thereby improving mechanical strength of finished product.
- Masterbatching approach improves mechanical strength as majority of the Ingeo™ resin undergoes one less heat process
- Small particle size of natural mineral helps increase strength with a high white index
- Does not contain any polypropylene, polystyrene, or any other conventional plastics that do not biodegrade
- Manufactured from renewable, biobased Ingeo™ natural plastic that is made from plants, not oil
- Approved for direct food contact and contains no heavy metals
- A total compound blend solution from a supply chain you can trust

Applications

Natur-Tec BF3002HT can also be used for injection molded plastic applications such as:

- Garment packaging and accessories
- Food service packaging and containers for hot food items
- Injection mold vine clips and other agricultural applications
- Single use coffee filter pods

Application: biobased, compostable high heat cutlery

Natur-Tec BF3002HT Data Sheet

Natur-Tec® BF3002HT High Perfomance Platform Product Description

Natur-Tec® BF3002HT is a platform of high-performance, biobased and compostable polymer resin compounds made with modified Ingeo™. This platform of resin compounds is specifically engineered for disposable food service applications where high heat performance and dimensional stability are critical. Furthermore, this platform offers a fully compostable alternative to polystyrene or polypropylene in applications such as single use cutlery, disposable coffee pods, and other single use food service ware.

The shrinkage is similar to PS and is therefore easily processable on equipment designed for PS 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.

Physical Properties*		
Property	**Test Method**	**Value**
Specific Gravity	ASTM D792	1.4-1.5 g/cm³
**Melt Flow Rate MFR 190°C, 2.16 kg	ASTM D1238	5-8 g/10 min
Molding Shrinkage	ASTM D955	Axial: 0.2 – 0.3% Lateral: <0.1

Mechanical Properties*		
Property	**Test Method**	**Value**
Tensile Strength	ASTM D638	64 MPa
Elongation	ASTM D638	7%
Flexural Strength	ASTM D790	108 MPa
Notched Izod Impact Strength	ASTM D256	223 J/m

Thermal Properties*		
Property	**Test Method**	**Value**
HDT (before crystallization)	ASTM D648	60 °C
HDT (after crystallization)	ASTM D648	125 °C
Heat resistance for cutlery applications		> 90 °C

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

** MFR determined from a 50/50 blend of Natur-Tec® BM 3002HT 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.

Contact Information

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