

# BF3002IM Resin

## Injection Molding Grade

### Product Description

The Natur-Tec® BF3002IM is a biobased and compostable impact-modified, nucleating resin compound intended for injection molding. Natur-Tec® BF3002IM meets the requirements of international standards for compostable plastics such as ASTM D6400 (U.S.), EN 13432, and ISO 17088.

### Product Features

- Engineered for applications where high-heat performance and/or dimensional stability are critical such as cutlery, coffee capsules, and stirrers
- Contains up to 97% bio content per ASTM D6866 and EN 16785 standards
- A two-part blend that consists of the Natur-Tec® BM3002HT and a specific Ingeo™ or Luminy® neat grade PLA. It can in most cases be co-injected with a barrier resin for applications such as coffee capsules
- Molded in a single-step using in-mold crystallization, at much-reduced cycle times and minimum part warpage
- Resin going through two heat histories is limited to the percent (%) masterbatch letdown (typically 15-25%) which helps maintain the molecular weight, resulting in improved mechanical strength for the final part as compared to a part manufactured with 100% fully compounded resin

### Applications

BF3002IM can be used for injection molded plastic applications requiring high heat performance such as cutlery, coffee capsules, and stir sticks.



### Food Contact

Natur-Tec® BF3002IM is compliant with both US FDA regulations and food contact regulations (EC) 1935/2004, (EU) 10/2011, and its amendments through (EU) 2019/37.

### Certifications



# BF3002IM Resin

## Injection Molding Grade



BF3002IM Technical Data			
Physical Properties			BF3002IM
Property	Unit	Test Method	Value
Specific Gravity	g/cm <sup>3</sup>	ASTM D792	1.3-1.4
Melt Flow Rate (190 °C with 2.16 kg)	g/10 min	ASTM D1238	6-9
Mold Shrinkage	%	ASTM D955	Perpendicular to Flow: 1.1 – 1.3 Parallel to Flow: 0.6 – 0.7 (when molded at 100 °C)
Mechanical Properties			BF3002IM
Property	Unit	Test Method	Value
Tensile Strength at Break	MPa	ASTM D638	56
Tensile Elongation at Break	%	ASTM D638	9
Tensile Modulus	MPa	ASTM D638	2350
Flexural Modulus	MPa	ASTM D790	6300
Notched Izod Impact Strength	J/m	ASTM D256	35
Thermal Properties			BF3002IM
Property	Unit	Test Method	Value
Heat Deflection Temperature (Un-annealed)	°C	ASTM D648 (0.455 MPa)	56
Heat Deflection Temperature (Annealed)	°C	ASTM D648 (0.455 MPa)	97
Data obtained from standard test bars molded at 100°C with 25/75 blend of Natur-Tec® BM3002HT masterbatch and Ingeo™ 3100HP			

**Storage and Handling:** For optimum performance and product life, store in a cool dry place out of direct sunlight. Refer to the Safety Data Sheet and the Processing Guide for specific handling and processing instructions.

