

BF5001 Resin

Sheet Extrusion Grade

Product Description

Natur-Tec® BF5001 biobased and compostable polymer resin is designed for sheet extrusion and thermoforming processes for products that require flexibility and strength. It is produced using proprietary technologies and is intended to provide alternatives to conventional plastics. Natur-Tec® resins are engineered for high performance and can be easily processed on conventional manufacturing equipment. Natur-Tec® BF5001 meets the requirements of international standards for compostable plastics such as ASTM D6400 (U.S.), EN 13432, and ISO 17088.

Product Features

- Improves the impact strength and flexibility of PLA sheets used in thermoforming and other applications allowing for deep-draw thermoforming needed for cups
- Ideal for the manufacture of straight, bent, and accordion-folded straws
- Contains at least 75% bio content per ASTM D6866 and EN 16785 standards
- Certified compostable by both the BPI and TÜV Austria (up to 559 microns depending on the application)
- Maintains the molecular weight of the resin compound, thereby improving the mechanical strength of the finished product

Applications

Suitable for profile extrusions such as straws and thermoforming applications such as cups and hot lids.



Food Contact

Natur-Tec® BF5001 compostable polymer resin is compliant with food contact regulations (EC 1935/2004, (EU) 10/2011, and its amendments through (EU) 2019/37.

| BF5001 Technical Data | | | |
|-----------------------------------|--------------------|-------------|-----------|
| Physical Properties | | | |
| Property | Unit | Test Method | Value |
| Specific Gravity | gm/cm ³ | ASTM D792 | 1.27 |
| Melt Flow Rate MFR 190°C, 2.16 kg | gm/10 min | ASTM D1238 | 10-15 |
| Melting Point | °C | DSC | 110 / 165 |
| Mechanical Properties* | | | |
| Property | Unit | Test Method | Value |
| Tensile Strength (MD) | MPa | ASTM D882 | 40 |
| Tensile Strength (TD) | MPa | ASTM D882 | 32 |
| Elongation (MD) | % | ASTM D882 | 70 |
| Elongation (TD) | % | ASTM D882 | 225 |
| Elmendorf Tear (MD) | gf | ASTM D1922 | 217 |
| Elmendorf Tear (TD) | gf | ASTM D1922 | 183 |

* Typical Properties of freshly blown 100 microns thick film

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.

Certifications



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.