

Technical Data Sheet BF700Z-X (old: BF703B-X) Blown Film Grade

Product Description

Natur-Tec® BF700Z-X is a range of fully biodegradable and compostable polymer resin compounds designed for film extrusion and use in flexible plastic applications. 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® BF700Z meets the requirements of international standards for compostable plastics such as ASTM D6400 (U.S.), EN 13432, ISO 17088 and AS4736. It is certified 100% compostable by the Biodegradable Products Institute (BPI), TUV-Austria, (OK Compost) and Australian Bioplastics Association (ABA). Please refer to the Material Safety Data Sheet and the Processing Guide for specific handling and processing instructions.

Applications

Natur-Tec® BF700Z-X can be used to produce film for applications such as, bin-liners, carry-out bags, coat hanger bags, agricultural film, hand gloves, aprons and consumer and industrial packaging.

Properties

| Physical Properties | | | BF7001* | BF7002* | BF7003* |
|--------------------------------------|--------------|---------------|-----------|----------------|----------------|
| Property | Unit | Test Method | Value | Value | |
| Specific Gravity | gm/cm³ | ASTM D792 | 1.3 – 1.4 | 1.3 – 1.4 | 1.26 – 1.28 |
| Melt Flow Rate MFR 190°C, 2.16 kg | gm/10 min | ASTM D1238 | 3-6 | 3-8 | 3-8 |
| Melting Point | °C | ASTM D3418 | 110 – 120 | 110 – 120, 160 | 110 – 120, 160 |
| Mechanical Properties | | | BF7001* | BF7002* | BF7003* |
| Property | Unit | Test Method | Value | Value | Value |
| Tensile Strength (MD) | MPa | ASTM D882 | 41 | 38 | 43 |
| Tensile Strength (TD) | МРа | ASTM D882 | 42 | 33 | 32 |
| Elongation (MD) | % | ASTM D882 | 584 | 209 | 103 |
| Elongation (TD) | % | ASTM D882 | 667 | 481 | 495 |
| Dart Impact | gm | ASTM D1709 | 364 | 340 | 293 |
| Elmendorf Tear (MD) | gf | ASTM D1922 | 76 | 25 | 5 |
| Elmendorf Tear (TD) | gf | ASTM D1922 | 169 | 50 | 51 |

^{*} Average properties of freshly blown films 0.6-1 mil thickness

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.

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