# Natur-Tec®

### **Technical Data Sheet**

## **BF700Z-X Resin** Blown Film Extrusion Grade

#### **Product Description**

Natur-Tec<sup>®</sup> BF700Z-X are fully biodegradable and compostable polymer resin compounds designed for film extrusion and use in flexible plastic applications. Produced by using proprietary technologies and intended to provide alternatives to conventional plastics. Natur-Tec<sup>®</sup> resins are engineered for high performance and can be easily processed on conventional manufacturing equipment. Natur-Tec<sup>®</sup> BF700Z-X 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) and TÜV Austria (OK Compost). BF7001 is also certified by the Australian Bioplastics Association (ABA).

#### **Product Features**

- Up to 32% biobased as measured by ASTM D6866 and EN 16785 standards
- Suitable for a wide variety of film and packaging applications
- Certified for compostability up to 120 microns by the BPI and up to 60 microns by TÜV Austria
- UV protection functionality available
- Excellent tear, elongation, and dart properties for finished products
- Clear and colored films available
- Finished products allow for crisp and clear printing
- Excellent heat-seal strength
- Can be used as a sealant layer in laminate structures

#### Applications

Natur-Tec<sup>®</sup> 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.



Certifications



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BF700Z-X Technical D				· · · · · · · · · · · · · · · · · · ·	
Physical Properties			BF7001*	BF7002*	BF7003*
Property	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	36.6	40.4	43.9
Tensile Strength (TD)	MPa	ASTM D882	33	30.5	33.5
Elongation (MD)	%	ASTM D882	635.8	186	116.3
Elongation (TD)	%	ASTM D882	719.6	577.3	447.4
Dart Impact	gm	ASTM D1709	397.4	300	237.8
Elmendorf Tear (MD)	gf	ASTM D1922	96.1	260.2	9.9
Elmendorf Tear (TD)	gf	ASTM D1922	236.8	41.4	31,3
Modulus (MD)	MPa	ASTM D882	178.1	707.5	1318.9
Modulus (TD)	MPa	ASTM D882	217.5	323	324.6
* Average properties of freshly h	lown films 0 7 0 8	mil thicknoss		•	·

\* Average properties of freshly blown films 0.7-0.8 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.

**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.