

XL730Z Compostable Laminates

Flexible Packaging Laminates

Product Description

Natur-Tec® XL730Z is a fully biodegradable and compostable family of laminates designed for packaging of dry and liquid food items requiring oxygen and water barrier. It is produced using proprietary technologies and is intended to provide alternatives to conventional plastics. The laminates come in the form of paper substrates (XL7300) and fully plastic based substrates (XL7301). Natur-Tec® XL730Z laminates are engineered for high performance and can be easily processed on conventional manufacturing equipment such as VFFS machines.

Product Features

- Produced using proprietary technologies and is intended to provide alternatives to conventional plastics
- Engineered for high performance and designed for lamination as a sealant layer to a variety of substrates such as paper and other compostable films
- Can easily process on conventional manufacturing equipment

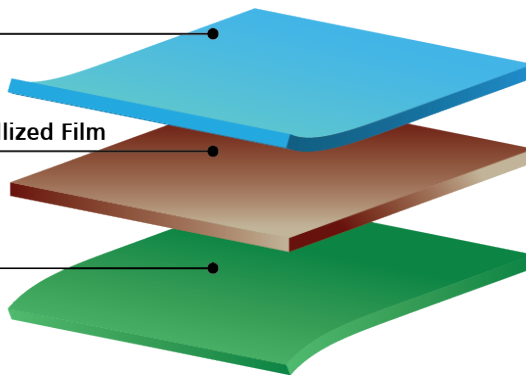
Applications

Natur-Tec® XL730Z laminates can be used to store food products such as nuts, candies, dressings and vinaigrettes.

Print layer | Paper or Natur-Tec® BF7003

Barrier layer | Natur-Tec® IXF7008 Metallized Film

Sealant layer | Natur-Tec® XF7301



Print Layer | Paper or Natur-Tec® BF7003

Natur-Tec® BF7003 is a high-performance, high clarity, biobased, and compostable blown film designed specifically for flexible packaging applications. BF7003 meets the requirements of international standards for compostable plastics such as ASTM D6400 (U.S.), EN13432, and ISO 17088.

Barrier Layer | Natur-Tec® IXF7008 Metallized Film

Natur-Tec® IXF7008 is a metallized film that can be laminated to other print substrates such as paper or other compostable clear biopolymer films to provide an excellent moisture and oxygen barrier. IXF7008 meets the requirements of international standards for compostable plastics such as ASTM D6400 (U.S.), EN13432, and ISO 17088.

Sealant Layer | Natur-Tec® XF7301

Natur-Tec® XF7301 is a high-performance biobased and compostable film designed to achieve excellent seal strength. It features a low seal initiation temperature with a broad seal window for strong, airtight seals.



XL730Z Technical Data

Physical Properties			XL7300*	XL7301*
Property	Unit	Test Method	Value	Value
Appearance	---	---	White	White
Thickness	micron	ASTM D1238	100	100
Grammage	gsm	---	131	122
Barrier Properties			XL7300*	XL7301*
Metric Units				
Property	Unit	Test Method	Value	Value
OTR (0% RH & 23°C)	cc/m ² /24 hours	ASTM F3985	8.08	3.54
WVTR (90% RH & 38°C)	g/m ² /24 hours	ASTM F1249	14.10	4.15
Imperial Units				
Property	Unit	Test Method	Value	Value
OTR (0% RH & 73°F)	cc/100in ² /day	ASTM F3985	0.52	0.23
WVTR (90% RH & 100°F)	g/100in ² /day	ASTM F1249	0.91	0.27
Mechanical Properties			XL7300*	XL7301*
Property	Unit	Test Method	Value	Value
Tensile Strength (MD)	MPa	ASTM D882	55	37
Tensile Strength (TD)	MPa	ASTM D882	29	25
Elongation (MD)	%	ASTM D882	4	241
Elongation (TD)	%	ASTM D882	10	654
Modulus (MD)	MPa	ASTM D882	4213	873
Modulus (TD)	MPa	ASTM D882	1552	306
Tear Strength (MD)	gf	ASTM D1922	74	137
Tear Strength (TD)	gf	ASTM D1922	87	221
Seal Window**	°C	ASTM F88	140-200	130-200
Seal Strength (120°C, 2.0 bar, 1.0 seconds)	kgf/inch	ASTM F88	2.99	1.61

*Average properties of laminates with 4 mil thickness. **Seal window performance temperatures were reported for laminates that exhibited a minimum of 0.5 kgf/inch when measured at 120°C, 2.0 bar, and 1.0 seconds.

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.

Food Contact

Natur-Tec® XL730Z compostable polymer resin is compliant with food contact regulations (EC) 1935/2004, (EU) 10/2011, and its amendments through (EU) 2019/37.

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.

