





Making a difference one cup at a time."

The Facts: all materials used to produce our cups, lids and containers are sourced from fully renewable resources.

#### The Paper

- The trees used to make the paper come from fiber sourced through a system that is independently certified to the Sustainable Forestry Initiative<sup>®</sup> (SFI<sup>®</sup>) standard. SFI<sup>®</sup> certification promotes responsible forestry practices.
- More than two-thirds of the energy used to make the paperboard comes from renewable biomass.

#### The Coating

- The plant material used to make the water resistant lining is grown in the United States and made from Ingeo™ biopolymer by Natureworks.
- Requires less energy to create than comparable quantities of polyethylene used in traditional single use paper packaging.

#### The Lid

 ecotainer<sup>®</sup> lids are made from the same plant-based, water resistant material as the cup, Ingeo<sup>™</sup> biopolymer by Natureworks.

#### **Domestic Sourcing**

 The raw materials for these products are all grown in the United States.

#### ecotainer® products...

- Perform in a manner comparable to traditional paper cups, containers and lids – consumers do not need to make compromises in the areas of aesthetics or function.
- Use an Ingeo, plant-based material to create a water resistant barrier on the paperboard and the lids. Ingeo is based on polylactic acid, a polymer derived from lactic acid produced by the fermentation of plants.
- Were the first large scale products and materials of this type in the marketplace.
- Are commercially compostable in most municipal and industrial composting facilities.
- Are entirely made in the USA.

#### Q What makes ecotainer® products different from "standard" cups and containers?

A In standard cups and containers, the paperboard is coated with a petrochemical based plastic (polyethylene) to make it liquid resistant. ecotainer® products are also made from plastic coated paperboard, but the plastic used in this cup and to make the lids is a bio-based polymer (Ingeo™) made from plants. Now, both the fiber and coating used to make the cup come from fully renewable materials. We believe this is a small step toward a more sustainable future.

#### Q Does ecotainer® packaging cost more?

A Yes, ecotainer® packaging costs a bit more due to the cost of materials and equipment modifications to manufacture the product.

### Q Won't the coating on the cup dissolve when filled with liquid if it is made with PLA?

A No, but this is one of the most common misconceptions associated with this product. The coating is not water soluble and will not dissolve in use with hot or cold beverages. It can, however, be consumed by microbes over time in a municipal compost environment.

### Q Will the lids deform or dissolve when exposed to hot or cold beverages?

A No, ecotainer® hot and cold lids are not water soluble and will not deform or dissolve in use with hot or cold beverages. Like our ecotainer® cups, the lids can also be consumed by microbes over time in a municipal compost environment.

## Q Will the cold cup lids deform when exposed to hot temperatures?

A Storage or transportation in an environment of high humidity and elevated temperatures may compromise product performance. Lids should be stored in an environment that minimizes exposure to heat. Proper attention to storage and shipping must be given through all levels of the supply chain.

#### Q Is "bio" plastic safe?

A Yes. The process used to make this material starts with naturally occurring plant sugars and ends with a nontoxic plastic similar to other materials used to package food. It is FDA approved, and although this application (coating paperboard) is relatively new, this material is used extensively for packaging produce and other food items. For more information on Ingeo™, visit natureworksllc.com.

#### Q What kind of inks are used on ecotainer® packaging?

A Graphic Packaging International uses water based inks for flexography printing and the inks are CONEG.

### Q Does this paperboard contain post consumer recycled content?

A ecotainer® packaging does not contain post consumer recycled fiber. This product can be manufactured with recycled fiber for an additional cost.



#### Q Is ecotainer® packaging elemental chlorine free?

A Yes. Graphic Packaging International uses an elemental chlorine free bleaching process for manufacturing its paperboard products.

### Q Are ecotainer® products certified to BPI® and ASTM standards for compostability?

A ecotainer® hot cups, hot cup lids, cold cups, cold cup lids, food containers, and food container lids have been certified by the Biodegradable Products Institute (BPI) and meet the ASTM D6400/6868 standards for compostability.

#### Q Can the PLA material be recycled?

A In municipalities that accept poly-coated paperboard and packaging, the material can be recycled. Companies have worked with local recyclers to integrate ecotainer® into the office paper waste stream.

#### Q Aren't all paper cups and containers biodegradable?

A No. Although paper is generally biodegradable, the traditional coatings for making these products usually prevent them from meeting compostability requirements. The Ingeo™ material used in ecotainer cup coating and lids makes it possible for the entire cup to be certified by the Biodegradable Products Institute to conform to ASTM standards for municipal composting.

### Q What is the difference between compostable and biodegradable?

A Compostable – In an appropriate composting program or facility such as an industrial composting system where the treatment conditions are carefully defined and controlled, all the materials in the product or package will break down into, or otherwise become part of, usable compost (e.g. soil conditioning material, mulch) in a safe and timely manner.

Biodegradable – After customary disposal, the entire product or package will completely break down and return to nature (e.g. decompose into elements found in nature within a reasonably short period of time).

#### Q Can I throw ecotainer® products on the side of the road?

A No. These products are not intended to be immediately degradable in a "roadside" environment. Ideally these products are either composted or recycled. We encourage all of our ecotainer® customers to take advantage of, and support, more environmentally friendly disposal options.

### Q This is compostable packaging but what happens if it ends up in a landfill? Have we really accomplished anything?

A Yes. The upstream benefits of sourcing fully renewable materials with improved environmental characteristics are real regardless of the end-of-use options. These benefits include reduced greenhouse gas emissions, reduced dependence on petrochemical materials and enabling other material recovery options.

### Q Can I compost the ecotainer® packaging in my home composting system?

A Because home composting system conditions vary and there are no standards, we cannot make any claims to this matter (composting conditions need to get to 140 degrees for the PLA to compost).

### Q Where can I find a composter in my area that accepts ecotainer® packaging?

A To find a composter in your area, visit www.findacomposter.com and look for facilities that accept paperboard.

# Q Since these cups are made with corn and there are concerns around rising food prices, how much PLA/corn is used to manufacture these cups?

A A very small amount, less than .001% of the total corn consumed in the U.S.A.

#### Q Can I use the ecotainer® products if I am allergic to corn?

A The cups do use a bio-plastic lining which has corn as a feedstock; however, because of the processing approach, no allergens remain by the time the plastic is applied to the paper.

#### ecotainer® certifications

#### **Biodegradability Testing**

- Compostable Plastics: ASTM D6400
- Ecotoxicity Tests of Compost: ASTM D6868
- Aerobic Biodegradation: ASTM D5338-98
- Aerobic Biodegradation: ISO 14855
- Pilot Composting: ASTM D6868
- Biodegradable Products Institute Certified: BPI
- European Standard for Compostable Packaging: EN13432

### Readily passes all ASTM and EN heavy metal product safety standards

- ASTM D6868
- ASTM E1645-01 and E1613-04
- US CONEG Model: CONEG4E
- ASTM F 963-07 CLAUSE 8.3

#### **Health and Safety**

- Direct and Indirect Food Contact for Packaging
- USA: FDA 21 CFR 170.3 PART 175 and 176 and VFR 176.170 (c)

#### Recycling

- TAPPI British Disintegration Test
- Full successful mill recycling trials with Mississippi River Corporation
- Manufacturing waste recycle for last three years: works well in standard paper recycling systems
- ecotainer® waste has been readily repulped using existing paper manufacturing technologies

Conforms to the Federal Food, Drug and Cosmetic Act sections 404, 505, and 512 for interstate commerce.

### **Graphic Packaging International**

800.537.4141 www.graphicpkg.com



