

ecotainer[®] Facts & FAQs

Facts about ecotainer[®] Products

- 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 adhere to the Sustainable Forestry Initiative[®] (SFI[®]) guidelines for management and harvesting. No trees from old-growth or endangered forests are used.
 - More than two-thirds of the energy used to make the paperboard comes from renewable resources
 - The Coating
 - The plant material used to make the water-resistant lining is grown in the United States and made into Ingeo[™] biopolymer by NatureWorks, LLC
 - Requires significantly less energy to create than comparable quantities of polyethylene used in traditional packaging
 - The Lid
 - The hot and cold lids is made from the same plant-based, water-resistant material as the cup, Ingeo[™] biopolymer by NatureWorks, LLC
 - Domestic Sourcing
 - The raw materials for these products are 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 (PLA) to create a water-resistant barrier on the paperboard and the lids. Polylactic Acid is a biopolymer derived from lactic acid produced by the fermentation of plants
- require less energy to manufacture the Ingeo[™] biopolymer (PLA) used in the coating than the polyethylene coating material it replaces
- represent the first large-scale products and materials of this type in the marketplace
- are commercially compostable in most composting facilities where they exist
- entirely made in the USA

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Frequently Asked Questions

- Q** What makes ecotainer[®] products different from “standard” cups and containers?
- A** In standard paper cups and containers, the paperboard used 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 an Ingeo[™] biopolymer (PLA) 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** Is this the first use of this product anywhere in the market?
- A** International Paper was first to commercialize a product of this kind, launching ecotainer[®] products in July 2006. Since then more than one billion ecotainer[®] products have been sold to a variety of customers, including many category leaders. In addition, new products have been added to the ecotainer[®] product line to provide a full offering of hot cups, hot cup lids, Cup Buddy sleeves, cold cups, cold cup lids, and food containers, all manufactured entirely in the US.
- Q** Does the ecotainer[®] packaging cost more?
- A** Yes, ecotainer[®] packaging costs a bit more due to the cost of the materials and equipment modifications to manufacture the product.
- Q** There have been clear PLA cold cups in the market for some time, these clear cups cannot be exposed to heat, without quickly deforming... Will the same happen with these ecotainer[®] PLA coated products?
- A** No. The Ingeo[™] biopolymer (PLA) used in ecotainer[®] products has been modified to maintain the required performance characteristics for paperboard packaging under elevated temperatures. This packaging has demonstrated performance in the market as a hot beverage cup and food container in the market for more than four years.
- 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. ecotainer 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.

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Q Is this new “bio” plastic made from plants safe?

A Yes. The process used to make this material starts with plant sugars and ends with a non-toxic 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™ PLA, visit natureworks.com

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

A International Paper Foodservice used water-based inks for flexography printing and the inks are CONEG.

Q Does this paperboard contain post consumer recycled content?

A At this point, ecotainer[®] packaging does not contain post consumer recycled fiber. We are investigating this possibility and may pursue this option in the future.

Q Is ecotainer[®] packaging elemental chlorine free?

A Yes. International Paper 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 and food containers have been certified by the Biodegradable Products Institute (BPI) and meet the ASTM D6400/D6868 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 is certified by the Biodegradable Products Institute to conform to ASTM standards for municipal composting.

Q What is the difference between a compostable cup and a biodegradable cup?

A Compostable – In an appropriate composting program or facility, or in a home compost pile or device, 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, i.e., decompose into elements found in nature within a reasonably short period of time.

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- 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** What kind of impact can I have as a single consumer?
- A** Combined, individual consumers in the United States alone use about 40 billion paper & 35 billion plastic and foam cold cups every year. 16 billion paper hot cups and 25 billion foam hot cups are also used in the US every year. Together, single consumers can impact the direction taken by retailers, and ultimately by packaging suppliers like International Paper.
- Q** Can I compost the ecotainer packaging in my home composting system?
- A** Because home composting systems conditions vary and there are no standards, we can not make any claims to this matter. (composting conditions need to get to 140 degrees in order 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, go to findacomposter.com, and look for facilities that accept paperboard.
- Q** Since these cups are currently made with corn and the concerns around driving prices up for food. 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 US. Less than a thousand acres of corn will be used for IP’s needs for 2009.
- Q** Can I use the ecotainer products if I am allergic to corn?
- A** The ecotainer 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.
- Q** What is an example of how ecotainer products are making a difference?
- A** Through a partnership with the National Park Foundation, International Paper is proud to launch a series of commemorative national park ecotainer[®] cups, available for anyone to purchase. The cups, International Paper’s commercially compostable ecotainer[®], feature eight different artistic renderings of iconic national parks along with an educational message about conservation and environmental stewardship. International Paper will donate one penny for each

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commemorative cup sold, up to \$1 million, to the National Park Foundation to be used to support the Foundation's efforts to promote and protect our national parks. To find out more please visit www.ipfoodservice.com

ecotainer® Certifications*

- **Biodegradability Testing:**
 - Compostable Plastics: ASTM D 6400-02
 - Ecotoxicity Tests of Compost: ASTM D 6868-03
 - Aerobic Biodegradation: ASTM D 5338-98
 - Aerobic Biodegradation: ISO 14855
 - Pilot Composting: ASTM D 6868-03
 - Biodegradable Products Institute Certified: BPI

- **Readily passes all ASTM and EN heavy metal product safety standards:**
 - ASTM D-6868-03
 - ASTM E-1645-01 AND E 1613-04
 - US CONEG Model: CONEG4E
 - ASTM F- 963-07 CLAUSE 8.3

- **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.

- **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)

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