

Brand Manager Alert: Compostable Biodegradable Plastics Are a Reality

Corn-based Evlon film offers NviroWare a multi-million-dollar merchandising opportunity in U.S. retail chains



As every brand manager knows, the written and unwritten rules on packaging are changing. Environmentally aware consumers are demanding an earth-friendly approach motivated by knowledge that plastic litter is leaching known carcinogens and hormone disruptors into the earth's soil and water. Government legislation isn't far behind.

Plastic trash vortex inspires BI-AX CEO to create Evlon

Municipalities across North America are demanding that retail stores and corporations pick up more of the tab for recycling mountains of plastic and other waste.

David Inglis, CEO of BI-AX International Inc., sensed a green packaging opportunity in the late 90s after he learned about the Eastern Garbage Patch, a swirling vortex in the Pacific Ocean of mostly plastic trash that has since grown to twice the size of the continental United States.

Inglis had been doing initial film development for NatureWorks LLC on their Ingeo resin and decided to transfer his company's expertise manufacturing plastic film to an earth-friendly, compostable, biodegradable alternative.

"We fully understand the strain on the earth due to petroleum-based plastics," says Inglis. "So we devoted ourselves to becoming part of the solution with an R&D program resulting in a completely compostable, biodegradable film called Evlon. Evlon is available in a wide range of thicknesses that can be used in all manner of consumer packaging."

Evlon certified by Biodegradable Products Institute

Evlon is certified by the *Biodegradable Products Institute (BPI)* as a packaging material that can disintegrate and biodegrade quickly and safely when composted in a professionally managed facility. When composted, all that remains is water and carbon dioxide.

The inspiration for Evlon came from the rolling fields surrounding BI-AX's two manufacturing plants, totaling 265,000 sq. ft., in the southwestern Ontario farm communities of Wingham and Tiverton. Evlon's key ingredient is corn, a renewable field crop that provides starch, converted to sugar, then fermented to form lactic acid. The lactic acid is converted into a lactide molecule using heat, then the lactic acid molecules are polymerized to form PLA, or Ingeo, provided to BI-AX by NatureWorks.

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Packaging options include bags, wrappers, rigid containers

BI-AX employs a proprietary process to turn the PLA into manufactured film – the raw material for printable, packaging including gift bags, health food and produce wrappers, candy wrappers, snack food bags, DVD and CD wraps, rigid cosmetics containers, labels, folding cartons and more. ►

More than 100 consumer packaged good companies use Evlon

Since Evlon's introduction in 2004, BI-AX has dealt with more than 100 consumer packaged goods companies, including Nviroplast, a LaPlace, LA-based bio-plastic resin and finished good manufacturer of environmentally friendly bio-plastic products with estimated 2009 revenues of \$2.5 million. One of those products is the Nviroware bio-plastic line of tableware products which include forks and knives that is packaged in a rigid, printed Evlon container.

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"The packaging had to be in keeping with our environmentally-friendly cutlery," says Nviroplast Founder/COO Blaine DuBose, "and I can tell you it was quite a search to find packaging that matched the green standards of our product. But Evlon met our requirements in every way. The BI-AX team worked with us as well as a packaging converter for more than six months to ensure we came to market with the best possible solution."

Nviroplast's \$10 million Evlon retailing opportunity

Nviroplast is currently on track to produce \$2 million-a-year with NviroWare products, and promises to be a \$10 million-a-year business based on interest from large U.S. retail chains. DuBose says Nviroplast will become a dominant \$100 million bio-plastics company within five to seven years.

This kind of growth is entirely possible. According to McKinsey and Co., by 2010 chemical products made at least partly by biotech methods could account for \$280 million of a projected \$1.4 trillion-a-year chemical market. As well as meeting growing consumer need for green packaging, new products like Evlon and Nviroware reduce foreign dependence on oil by substituting raw materials from North American farm fields nearer the markets where the products are consumed.

Nviroplast is in the final stages of securing several large retailers with NviroWare tableware products. NviroWare products include: plates, bowls, cups and cutlery kits. The suggested list price ranges from \$3.29 for a package of 15 count plates to \$3.39 for a package of 48 pieces of cutlery compared to "oil-based" competitors that retail for about \$2.39 for plates and \$2.59 for cutlery kits.

NviroWare is being widely accepted despite the 50% green premium

"We are experiencing tremendous success with "NviroWare," says DuBose. "And we've heard that our retailers in some cases are marking up NviroWare products that represent about a 50% premium over traditional plastics. This matches our own research that says 80% of consumers will pay 99 cents more for the demonstrably greener version of consumer staple products." Consumers want to do the right thing," he adds, "and that's what is being reflected in our retail customers' environmental mandates."

Brand managers understand the green in green

Doing the right thing does engender extra cost, note both Nviroplast's and BI-AX's executives. "One of the toughest parts of our job is convincing customers that our products deserve a premium price over petroleum-based products, but will help them make money," says DuBose.

"We'll often get stopped by a purchasing manager, but once we get to the brand manager, like the people at Nviroplast, they understand they can charge a premium and build a stronger business," says Inglis. "In a typical package we're talking pennies per unit for a product that can range from a couple of bucks for a consumer staple to \$40 or more for cosmetics. As with all products, when the volume becomes large the economics of scale go to work and price tends to go down."

Green consumers speak with their wallets

"In our case Evlon is an absolute requirement," says DuBose. "Yes, it costs more than plastic, but our customers are thrilled that our bio-plastic cutlery sets are biodegradable and compostable right down to the packages we put them in. The bottom line's right at the cash register, and consumers are speaking with their wallets." ▲