

Terraloy PLA Compounds win SPI Bioplastics Innovation Award

Source: Plastics News, Plastics Today

Posted: May 19, 2014



Teknor Apex Co.'s bioplastics division has been honored for developing heat-resistant polylactic acid compounds with high impact properties. The Terraloy materials won the 2014 Innovations in Bioplastics Award, sponsored by the Society of the Plastics Industry Inc.'s Bioplastics Council. Nominees were judged on innovation, sustainability measures and impact to the marketplace. They will be honored at the Biopolymers Symposium, scheduled for May 12-13 in Philadelphia.

"Teknor Apex has a long history of innovations in bioplastics and truly deserves this recognition," said Barbara Fowler, conference director for Smithers Rapra, which is sponsoring the event. Terraloy's technical team, headed by Greg Anderson, worked with research partner Cerestech Inc. to enhance PLA in areas such as heat resistance, impact resistance, and processability, while retaining Food and Drug Administration compliance, high bio-based content, and compostability, according to Edwin Tam, Teknor Apex's manager of new strategic initiatives.

In a life cycle analysis showed that Terraloy PLA compounds with high heat distortion temperatures produced 125 percent less greenhouse gas than high impact polystyrene (HIPS) and 40 percent less than low density polyethylene (LDPE). Unlike materials produced by the crystallized PLA process, there is no post-annealing or post-crystallization required, according to the company.

Pawtucket, R.I.-based Teknor Apex developed two types of Terraloy compounds: an injection molding grade for foodservice items such as cutlery for hot food, and an extrusion/thermoforming grade for hot beverage lids. The compounds are compostable and meet the ASTM D-6400 standard, according to the company. Teknor Apex has received USDA BioPreferred certification. Bio-based content of the molding and extrusion grades is 84 and 96%, respectively.

PHA Producer Meredian Gets Certifications for Biodegradability from Vinçotte International

Source: SpecialChem, Meredian

Posted: May 16, 2014



Privately held biopolymer manufacturer Meredian, Inc., one of the world's largest producers of PHA (polyhydroxyalkanoate), has received four certifications and two statements of biodegradability from Vinçotte International, headquartered in Vilvoorde, Belgium. Meredian, Inc. is the only company in the world to receive these certifications of biodegradability in all six mediums. The approval of these certifications further serves to highlight Meredian Inc.'s mission to create the most ecologically sound biodegradable plastic on the market. "Gone are the days of filled landfills, here are the days of sustainability and ecological responsibility. Thanks greatly in part to the achievements being made by Meredian, Inc."

These certifications ensure that our products are leading the industry in advancements that will make a remarkable difference in the world of bioplastics," said Dr. Paul Pereira, Executive Chairman of the Board of Directors at Meredian, Inc. Meredian's many Vinçotte certifications help welcome a new and exciting period for this impressive company. Over 150 patents and applications have helped establish Meredian, Inc. as one among the world-leader in reactive extrusion and PHA biopolymer applications, and these certifications are just another stride forward.

These certifications guarantee that Meredian Inc.'s products are biodegradable by all six mediums: anaerobic, soil, freshwater, marine, industrial composting and home composting. Meaning that Meredian's FDA food contact approved PHA can decay in essentially any compost situation, even home compost situations that tend to have lower temperatures. In demonstrating this biodegradability, Meredian, Inc. showcases their readiness to move forward in producing a bioplastic that will change the way the world views plastics.

"Our PHA formula aims at meeting the needs of consumers who are conscious of the impact that they have on the environment. By creating a plastic that is biodegradable by all six mediums, Meredian, Inc. hopes to continue our mission of sustainability that is accessible by all," says Dr. Paul Pereira. "Gone are the days of filled landfills, here are the days of sustainability and ecological responsibility. Thanks greatly in part to the achievements being made by Meredian, Inc."

Green Premium Prices along the Value Chain of Biobased Products

Source: Bioplastics News

Posted: May 15, 2014

Bio-plastics are usually more expensive than their conventional counterparts, and companies face supply chain challenges when they switch from one raw material solution to another. Nevertheless, the bio-based plastics market continues to grow. GreenPremium plays an important part in this. In its paper “GreenPremium along the value chain of bio-based products” Nova-Institute is, for the first time, putting forward a clear definition of GreenPremium:

GreenPremium price is the additional price a market actor is willing to pay for the additional emotional performance and/or strategic performance of the intermediate or end product the buyer expects to get when choosing the bio-based alternative compared to the price for the conventional counterpart with the same technical performance.

The results of the surveys and analyses of 35 cases of bio-based chemicals, polymers and plastics clearly demonstrate that GreenPremium prices do indeed exist and are paid in the value chains of different bio-based chemicals, polymers and plastics—especially for new bio-based value-added chains and on the European market. In line with the definition of GreenPremium, the motivation for paying additional prices is the bio-based product’s expected increased emotional and strategic performance.

In the absence of any policy incentives, GreenPremium prices are very important for the market introduction of bio-based products, and many new bio-based polymers and plastics would not even exist if there were no customers willing to pay GreenPremium prices.

The range of reported GreenPremium prices in the various branches and applications analyzed ranges from a 10% to a 300% premium over the conventional petrochemical product with the same technical performance. Most of the GreenPremium prices found lie within a range of 10-20% for bio-based intermediates, polymers and compounds, followed by the 20-40% range. Higher GreenPremium prices could only be obtained in specific cases.

For the end consumer the range of GreenPremium prices for bio-based products goes from 0% (car, cosmetics, bottle) to 25% (wall plug, toy) with, in the middle, a 10% GreenPremium for organic food with bio-based packaging. The empirical data shows that in all cases the GreenPremium price levels (in percentage) decrease along the supply chain towards the end consumer, sometimes with an intermediate peak. The two main reasons are: the material costs share of the total product price decreases along the value chain; and the highest GreenPremium price is paid predominately for the intermediates. Without this enhanced and confirmed willingness to pay GreenPremium prices for intermediates, many new bio-based value-chains would not have been implemented at all.



Natureworks Packaging Selects Cardia Bioplastics as Partner to Develop Bag and Waste Management Products for the Australian and International Markets

Source: Thomasnet News

Posted: May 6, 2014

Australia's Natureworks Packaging design, market and distribute proprietary bag and waste management products manufactured by Cardia Bioplastics using Cardia Compostable and Biohybrid™ resin technology. \$200,000 of Cardia Bioplastics bag and waste management products ordered by Natureworks Packaging during the last 12 months and sold through their extensive sales force. Natureworks extend Cardia Bioplastics market reach and add a strong distribution channel.

Cardia Bioplastics and Natureworks Packaging will target international markets for sustainable packaging and products with initial customer orders already received. Natureworks Packaging products made from Cardia Compostable resin technology Cardia Bioplastics Limited (ASX: CNN) is pleased to announce that it has partnered with Natureworks Packaging to increase sales of compostable and Biohybrid™ bag and waste management products in the Australian and international markets.



Natureworks Packaging is an Australian supplier of biodegradable packaging and products to Australia and Asia. Together with its international partners, Natureworks Packaging produce and supply biodegradable and compostable shopping bags, trash bags, cups, lids, labelling, containers, packaging wrap and other items.

Cardia Bioplastics and Natureworks Packaging have an established relationship with Natureworks having placed orders for \$200,000 of Cardia Bioplastics bag and waste management products during the last 12 months, which were sold through their extensive sales force. The two companies are further cementing their relationship to further develop the Australian and international sustainable packaging, waste management and retail markets with a range of compostable and Biohybrid™ products.

Natureworks Packaging Managing Director, Peter Errichetti said, "The technical performance and environmental integrity of our products is paramount and at the core of our business – Cardia Bioplastics technology exceeds the high standards we've set. We are therefore delighted to have secured a strategic supply relationship with Cardia for our Australian and international customers. We look forward to a long-term relationship with Cardia."

Dr Frank Glatz, Cardia Bioplastics Managing Director said, "The Australian market presents an excellent growth opportunity for Cardia Bioplastics and we are very excited about developing a new distribution channel through our relationship with an innovative company such as Natureworks Packaging. Both our fully certified Cardia Compostable bags and waste management products as well as our proprietary Biohybrid™ technology are ideal for the Australian and international market and we look forward to working with Natureworks Packaging to capture market share. We are continuing to see increased demand globally for our resins, films and finished products."

Garnier® And TerraCycle® Beautify Another Community With A Garden Made From Recycled Beauty Packaging

Source: PR Newswire

Posted: May 5, 2014

Last year, Garnier and TerraCycle transformed over 1,500 pounds of recycled personal care waste into a one-of-a-kind Garnier Green Garden in New York City. This year, Garnier and TerraCycle have announced the nationwide rollout of the Garnier Green Garden Project, a program designed to create gardens for deserving communities.

In a contest called, "Where Should Our Garden Grow?" Garnier and TerraCycle have asked for public participation to help choose the most deserving community organization to receive the next Green Garden, capable of yielding more than 2000 pounds of vegetables, fruit, herbs and flowers. The gardens not only provide communities with a safe space to connect and enjoy nature, but they also allow residents to grow their own fresh food.

The beauty waste to be used in the garden is collected through Garnier's Personal Care and Beauty Brigade®, a free recycling and fundraising program that pays for every piece of waste collected and returned to TerraCycle. The collected beauty waste, which would otherwise be destined for landfills, consists of non-recyclable hair care, skin care and cosmetic packaging. These products will be recycled by TerraCycle to create many of the plastic components of the garden, such as raised beds, picnic tables and trash cans.

Each Garnier Green Garden will include the following features:

- 100% completely recycled materials
- Designated areas for garden plants
- Rest and seating areas
- Beautiful and practical design and landscaping

