ADM Ending Bioplastics Venture with Metabolix

Source: Plastics News

Posted: January 13, 2012

Bioplastics resin maker Metabolix is losing its commercial alliance with agricultural company Archer Daniels Midland (ADM). ADM said the venture is not delivering sufficient results, and that financial projections for the business are too uncertain. As a result, Telles, the US-based sales and marketing alliance formed to commercialize Mirel polyhydroxyalkanoate resin, will be dissolved. Metabolix said it is conducting a strategic review of its business plans for 2012, and that it will restructure its bioplastics business and downsize its operations.

"Clearly, we are disappointed by ADM's decision to withdraw from Telles. While this is a setback, we remain committed to successfully commercialising PHA bioplastics. Over the past few years, we now have proven the technology at industrial scale and believe that we now have the opportunity to launch this business with a different business model," said Metabolix CEO Richard Eno, in a news release.

Metabolix reported a loss of $29.2m (€22.8m) for the nine month period that ended 30 September, on sales of $567,000 (€442,280). The news may be surprising -- given plastics industry interest in biopolymers. However, there has been more activity recently in the sector of the bioplastics market that involves making conventional resins made from plant materials, including polyethylene, PET and polypropylene. Corn-based polymers like PHA have been receiving less attention.

A recent report from Ceresana Research, for example, predicted that the global bioplastics market will grow an average of 17.8% annually to reach $2.8bn (€2.2bn) in sales in 2018 -- but much of the growth will come from non-biodegradable bioplastics. Telles may be a well known brand, but the company's is still in start-up mode. Last year the company started Mirel production at a plant in Iowa, the US. According to ADM, there are about 90 full-time ADM Polymer employees in Clinton, plus a small number elsewhere that support Telles sales efforts in Europe. The company will evaluate the impact on staffing of its decision to exit the joint venture.

According to a news release, ADM Polymer may provide PHA fermentation services for Metabolix during a three-year period following termination of the agreement. "We have analysed our business portfolio, identifying areas that are not delivering sufficient results now or are not expected to deliver sufficient results within a reasonable timeframe," said Mark Bemis, president of ADM's corn division, in a release. "We have had a good working relationship with Metabolix, and the fermentation technology performed well at our facility. Unfortunately, uncertainty around projected capital and production costs, combined with the rate of market adoption, led to projected financial returns for ADM that are too uncertain. Therefore, we have decided to exit the business as permitted by the commercial alliance agreement with Metabolix."

ADM said it is evaluating other uses for its fermentation plant in Clinton. ADM said it will take a one-time pretax charge of $300-360m (€234-280m) in the second quarter as a result of its decision.

Metabolix said it plans to continue to focus on development of renewable industrial chemicals, and that it will "retain a core team in its bioplastics group to provide continuity with the technology and market".

Cereplast Develops Compostables with Less Stretch

Source: Plastics News
Posted: January 4, 2012



Cereplast Inc. has developed three biobased resins for use on blown film extrusion lines to make compostable bags. All three have received DIN CERTCO certifications of compostability for up to 1 mil thickness, according to the El Segundo, Calif., company.

"The market has been demanding improved properties for compostable films, and we are excited to introduce a new range of bioplastics resins that provide superior processability, better tear resistance, and less stretch," states Cereplast Chairman and CEO Frederic Scheer. Compostable 3002, 3010 and 3020 are alternatives to polyethylene for carry bag and trash bag uses. They are aimed at a variety of thicknesses, tear resistance and stretch. The materials are based on Ingeo polylactide and other compostable components. "Consumers will particularly be pleased, as bags that stretch too much are a common complaint amongst shoppers, and our new compostable resins provide a solution," Scheer adds.

Bioplastics Project Uses Organic Waste

Source: European Plastics News
Posted 20 December 2011



A European project led by the Cidetec-IK4 technological centre in Spain's Basque region is aiming to develop plastics using organic waste as a raw material. The Eclipse project between 2012 and 2014 will use nanotechnology methods to develop bio-based plastics from waste sources such as banana plants, almond nut shells and crustacean shells.

Cidetec-IK4, based in San Sebastian, said the popularity of plastics like PLA made from maize has caused concern that agricultural land is being earmarked to growing vegetables for the production of biofuels and bioplastics. Using waste organic products does not compete with food crops, it said.

Ibon Odriozola, head of the nanotechnology unit at Cidetec-IK4, said that, apart from the environmental challenge for the project, "Eclipse has an economic objective, as this project aims to increase the competiveness of European countries in the biopolymers' market without increasing the price of basic foods." The project partners include universities and companies in Germany, Belgium and Spain, along with and organizations in Chile and Colombia.

Toyota Looks at Future with Bioplastics

Source: PLASTICS NEWS CORRESPONDENT
Posted: December 13, 2011

Automakers increasingly recognize plastics as both a preferred design material and a way to improve car performance and sustainability. OEMs are focusing on innovative styling, increased fuel economy and cutting vehicle weight to get more competitive."About 10 percent of weight reduction improves mileage by about 6 percent," said Shekar Viswanathan, deputy managing director for commercial operations at Toyota Kirloskar Motor Pvt. Ltd. of Bangalore, India. Viswanathan spoke at the recent Automotive Plastics show in Mumbai about the future of various resins.

"Besides weight reduction, a plastic also helps in streamlining vehicle shape," he said. Over the years, Toyota has replaced metal with plastic components for many applications in its vehicles. For example, in Toyota's popular Innova, a compact multipurpose vehicle, plastics are used in instrument-panel components, seats, front-end modules, inner door panels, body panels, bumpers and many other parts. Toyota also has taken interesting green initiatives. It's developing pre-colored resins to avoid after-molding painting and related operations such as paint emissions control, de-dusting and curing. Toyota is testing some bioplastics in various models and if the results are encouraging and cost-effective, they will be used in all Toyota models, according to Viswanathan.

Toyota's hybrid Prius is eco-friendly in many ways. The carmaker has gone beyond the powertrain by using bioplastics made from corn, sugarcane or kenaf in the Prius frame. "Prius uses the eco-plastic in several interior components like door trim, seat cushions and scuff boards," Vishwanathan said. Bioplastics also are used in the interiors of the Lexus HS 250 hybrid. "Bioplastics realize 20 percent less total CO_2 over the life of the car," Vishwanathan said. "With the increasing size and competition of the Indian automobile market, OEMs are looking at innovative ways to replace steel with plastics," he added.