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Ashland wins 2013 Breakthrough Technology award from Pulp & Paper International (PPI)

Ashland's Biobond. Improving the Sustainability of PaperSM program ("Biobond") improves sustainability and productivity for paperboard manufacturers

WILMINGTON, Del. - Ashland Water Technologies' Ludwig Krapsch, turned an idea for recovering and reusing starch in waste paper into an innovative program that improves sustainability and productivity for manufacturers of recycled paperboard. Less than three years after its launch, the company's [Biobond technology](#) has become the go-to choice for a growing number of paperboard companies around the world.

The success of the innovation has earned Ashland the [2013 Breakthrough Technology of the Year award](#) from Pulp & Paper International. The announcement was made during RISI's Global Outlook Conference held earlier this month in Dubai. The annual PPI Awards, launched by RISI in 2009, recognize the achievements of companies, mills and individuals in the pulp and paper sector.

Ashland's Biobond technology allows the high amounts of starch present in wastepaper furnish to be recovered and recycled along with the fiber. Historically, this has been a sizeable problem. Within the European paper industry, approximately 1.4 million tons of starch is lost each year as wastepaper is converted to new paper. Using Biobond technology helps ensure the majority of this starch is preserved, recycled and reused as a raw material. The process uses exclusive Ashland biocide and cationic polymer chemistries. The Biobond program increases yield, improves strength and eliminates the operational issues caused by degraded starch at the source. Additionally, the Biobond program reduces freshwater/starch consumption and levels of chemical oxygen demand (COD) levels in the effluent discharge, improving the sustainability of paper.

"It is exciting for Ashland to receive this award. I have enjoyed being a key player in the development of this game-changing program," said Krapsch, director, pulp and paper, Ashland Europe, Middle East and Africa (EMEA) region. "Because the Biobond program allows the papermaker to recycle fiber, filler, and the starch, customers have seen tremendous environmental and productivity benefits, he continued."

"Using Biobond technology eliminates thousands of tons of carbon dioxide emissions due to reduced fiber and starch usage, helping to improve sustainability in the pulp and paper industry," said Michael O'Byrne, global marketing director, packaging, Ashland. "Going forward, we will continue to collaborate with our customers to continue to bring practical innovations that truly make a difference".

About Ashland Water Technologies

Ashland Water Technologies, a commercial unit of Ashland Inc. (NYSE: ASH), is a leading global producer of papermaking chemicals and a leading specialty chemical supplier to the pulp, mining, food and beverage, paper, chemical processing, general manufacturing, institutional and municipal markets. Its process, utility and functional chemistries are used to improve operational efficiencies, enhance product quality, protect plant assets and help ensure environmental compliance.

About Ashland Inc.

In more than 100 countries, the people of Ashland Inc. (NYSE: ASH) provide the specialty chemicals, technologies and insights to help customers create new and improved products for today and sustainable solutions for tomorrow. Our chemistry is at work every day in a wide variety of markets and applications, including architectural coatings, automotive, construction, energy, food and beverage, personal care, pharmaceutical, tissue and towel, and water treatment. Visit ashland.com to see the innovations we offer through our four commercial units - Ashland Specialty Ingredients, Ashland Water Technologies, Ashland Performance Materials and Ashland Consumer Markets.

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