



Fitesa announces the commercialization of a 100% biobased spunbond performance nonwoven for the hygiene and personal care markets

Three way collaboration between Fitesa, Braskem and NatureWorks to develop new nonwoven from 100% plant based materials.

Simpsonville, SC (September 26, 2013) – Fitesa, Braskem and NatureWorks engineers have worked together to produce a new performance nonwoven product composed of not one, but two biobased polymers in a sheath-core, bicomponent configuration. The sheath is made of Braskem's I'm green™ 100% biobased polyethylene while the core uses NatureWorks' 100% biobased Ingeo polylactide. The resultant nonwoven is extremely soft, thanks to the bio-PE outer sheath, yet remains strong and robust due to the Ingeo core.

Fitesa will offer the fabric in a comprehensive range of basis weights with physical properties designed to allow drop-in replacement in existing bicomponent spunbond applications. "The fabric softness is exceptional," noted Ray Dunleavy, Fitesa Marketing, Strategy, and Business Development Director, "and counters the misperception some have in the market that there must be some compromise in performance to achieve a 100% renewably sourced product."

The three companies collaborated to develop a product that highlights and supports Fitesa's commitment to performance and sustainability by replacing traditional petrochemical based materials with renewable products made from plants.

The production of both the Braskem and NatureWorks polymers provide significant carbon footprint reductions by removing CO₂ from the atmosphere. Each ton of Braskem I'm green™ plastic produced sequesters more than 2.0 tons of CO₂, a significant gain compared to traditional plastic, whose production releases CO₂*. Additionally, Braskem's Code of Conduct for Ethanol Suppliers has been established to ensure responsible sourcing. Braskem has been making the I'm green™ polyethylene since 2010 at its Triunfo Petrochemical Complex, in the state of Rio Grande do Sul, in the south region of Brazil. The plant's capacity is 200 kton/year and the total investment amounts to US\$290 million.

Each ton of Ingeo produced provides 60% reduction in CO₂ emitted compared to traditional polyester, and a 30-40% reduction in CO₂ emitted compared to traditional polyolefins. NatureWorks has been producing Ingeo at its flagship Nebraska US facility since 2002, and recently expanded capacity there to 150 kton/year. The company has just announced that front end engineering design has commenced for a 2nd Ingeo facility in Southeast Asia. In 2012, NatureWorks achieved 3rd party certification from both the International Sustainability & Carbon Certification (ISCC) Association and the Institute for Agriculture and Trade Policy (IATP), a U.S. based Non-Governmental Organization (NGO), ensuring responsible materials sourcing and sustainable agricultural practices.

ABOUT FITESA

Fitesa is a leader in the design and manufacture of nonwoven fabric solutions for the global hygiene market. Enjoying global reach from its manufacturing sites in North and South America, Europe and Asia, Fitesa employs a wide range of nonwoven production technologies to meet customer requirements for service, quality, and flexibility. Fitesa specializes in the development of innovative products, both independently and in collaboration with customers. For more information about Fitesa and its products, visit www.fitesa.com.

ABOUT BRASKEM

Braskem is the largest producer of thermoplastic resins in the Americas. With 36 industrial plants in Brazil, the United States and Germany, the company produces over 35 billion pounds of thermoplastic resins and other petrochemicals per year. Braskem is the world's leading biopolymers producer with its 440 million pound green polyethylene plant that produces polyethylene from sugarcane-based ethanol.

Braskem America is the leading producer of polypropylene in the United States, with five production plants located in Texas, Pennsylvania and West Virginia, and a Technology and Innovation Center in Pittsburgh. Headquartered in Philadelphia, Braskem America is a wholly owned subsidiary of Braskem S.A. For more information about Braskem and its products, visit www.braskem.com.

ABOUT NATUREWORKS

NatureWorks LLC is a company dedicated to meeting the world's needs today without compromising the earth's ability to meet the needs of tomorrow. NatureWorks LLC is the first company to offer a family of commercially available, low-carbon-footprint Ingeo™ lactides and biopolymers derived from 100 percent annually renewable resources with performance and economics that compete with oil-based intermediates, plastics, and fibers, and provide brand owners new cradle-to-cradle options after the use of their products. NatureWorks is jointly owned by Thailand's largest chemical producer, PTT Global Chemical, and Cargill, an international producer and marketer of food, agricultural, financial, and industrial products and services. www.natureworkslc.com

*based on Braskem cradle to gate Eco efficiency analysis done by Fundação Espaço Eco, 2007