

Kuraray Develops High-Barrier, Recyclable Resin for Paper Coating

Paper-based PLANTIC™ EP resin-coated pouch earns prestigious recycling certification from Western Michigan University

HOUSTON – Kuraray America, Inc. (Kuraray America), a world leader in performance-based polymers and special materials technology, today announced a new grade of PLANTIC™, the company's sustainable, high-performance barrier material. A plant-based resin designed specifically for converters who perform extrusion coating, PLANTIC™ EP can be used to develop sustainable gas and aroma-barrier solutions with paper, paperboard or traditional film substrates. The new resin grade recently passed repulping and recyclability certification from Western Michigan University (WMU), laying the groundwork for sustainable barrier pouch and carton formats for brand owners and converters. With PLANTIC EP, the market now has a high-barrier option which can be fully recoverable and recyclable in the U.S. paper stream.

“Companies recognize the need for packaging to assure product integrity and shelf life, while consumers don't want to buy products which add to landfills,” said Tom Black with Kuraray's Plantic division. “We noticed a gap in the market and need for a sustainable material that could be used to produce high-barrier pouches and cartons and knew PLANTIC EP could be a game-changer. The new resin grade not only complements our customers' and retailers' dynamic range of products, but with recyclable certification from Western Michigan University, it helps brands achieve their sustainability objectives, enabling us all to leave behind a better world for our children.”

Derived from starch, PLANTIC is the world's most advanced bio-based plastic. It can be used in both recycle-ready and compostable formats while providing renewable, plant-based content and excellent gas-barrier performance to extend shelf life. It can dramatically reduce the environmental impacts produced from traditional packaging materials while providing the opportunity for materials once considered not recyclable to be reusable.

In designing a high-barrier pouch for recyclability, Kuraray extrusion coated PLANTIC EP to kraft paper and capped it with a tie/heat seal layer with resin from Westlake Polyethylene. When used within a multilayer film, PLANTIC EP helps create a high-

barrier, flexible pouch or carton allowing other layers in the structure can be separated, recovered and potentially recycled or composted.

“Our collaboration with Kuraray utilized our application development resources to the fullest to create a truly unique offering in the market,” said Amy Moore, vice president, Westlake Polyethylene. “We understand Kuraray’s technology and look forward to working together on further developments as they commercialize the offering across the bandwidth of market segments and categories.”

Kuraray recognized the need for brand owners to certify packaging sustainability. It submitted its PLANTIC EP/Westlake paper-coated pouch to WMU to determine its repulpability and recyclability. During the repulping process, all of the PLANTIC EP resin rinsed out. Therefore, in October 2022, WMU certified the PLANTIC EP/ Westlake pouch as recyclable.

“Recognizing the recyclability certification from WMU is a big first step in securing a How2Recycle claim,” Black said. “When developing packaging formats for brand owners, converters want to see that products have first been vetted by WMU. Its certification allows converters to apply for a pre-qualification letter from How2Recycle, effectively fast-tracking adoption of PLANTIC EP-based, high-barrier solutions.”

PLANTIC EP is currently available for trial and commercially in use with several brands around the world. Targeted applications include pouches and cartons for coffee, pet food, dry mixes and more.

About Kuraray

Founded in 1926, Kuraray is a world leader in performance-based polymer and specialty materials technologies, including resins, chemicals, fibers, and textiles. The Company operates many subsidiaries around the world, including Kuraray America, Inc., headquartered in Houston, Texas. The Kuraray Group is committed to developing new fields of business using pioneering technology that improves the environment and enhances the quality of life throughout the world.

About Westlake

Westlake is a global manufacturer and supplier of materials and innovative products that enhance life every day. Headquartered in Houston, with operations in Asia, Europe and North America, we provide the building blocks for vital solutions — from housing and construction to packaging and healthcare, to automotive and consumer.

McKenna Parr

Griffin Communications Group
(832) 226-3858; mckenna@griffincg.com

MEDIA CONTACT

McKenna Parr