

Press release

2024-10-30

SIG announces APR-recognized recycleready bag-in-box package for beverages featuring SIG Terra RecShield D laminate

SIG announced today that they have been formally recognized by the Association of Plastic Recyclers (APR) for meeting the highest criteria for recyclability according to the APR Design® Guide for Plastics Recyclability for the SIG Terra RecShield D bag-in-box package for beverages such as post-mix syrup.

Recycling has been a hot topic for many years now, and consumers are demanding more from the brands they know and love. To support those brands, SIG, a leading solutions provider of packaging for better, is striving to design solutions that simplify packaging structures and reduce packaging waste, enabling easier recycling and aligning with corporate brand sustainability goals.



APR Design® for Recyclability Recognition provides third-party validation that a package or packaging component's design is compatible with the North American recycling system. This process confirms the SIG Terra RecShield D bag-in-box package has met the highest criteria for recyclability according to the APR Design® Guide. Part of the SIG Terra portfolio, SIG's marker for sustainable packaging innovations, this particular package, featuring the SIG Terra Versi Connect 2750 fitment, is the first bag-in-box solution for post-mix beverage concentrates to pass this testing and be formally recognized by APR.

The third-party testing was performed by <u>Plastics Forming Enterprises</u> (PFE). PFE tested the SIG bag, which was made with two layers of film, a polyethylene closure, and a polyethylene evacuation device. The primary part of this testing involved reprocessing the entire bag-in-box package, including the closure and evacuation device, into blown film.

The outer layer and key innovation, made of SIG Terra RecShield D laminate, is a film specifically designed to offer durability that withstands the rigors of the post-mix beverage concentrates



distribution chain. The fitment, <u>SIG Terra Versi Connect 2750</u> was specifically designed for the post-mix industry, and, when combined with the <u>SIG DipStrip</u>, ensures over 99.8% product evacuation, reducing food waste. Upon meeting these testing guidelines, this product was added to the SIG Terra portfolio where SIG continuously works to simplify substrate structures, utilize renewable materials, and think circularity to ensure that the next generation of packaging is a part of the solution to decarbonize the food and beverage industry.

Brent Haynam, Director of Commercial Engineering and Sustainability at SIG, states: "As companies strive for net zero, recyclability is a key lever in their sustainability journeys. In North America, we've seen the focus here shift beyond retail and into the foodservice arena, which shows the importance of developing better packaging solutions. Not only is it important that our packaging reduces product waste, but it needs to reduce packaging waste as well. Innovating with recycle-ready solutions are foundational steps to this journey."

Teresa Bernal-Lara, Ph.D., Global Head of Film Development, Bag-in-Box and Spouted Pouch at SIG, said of the new launch: "Realizing the trade-offs of recycle-ready structures currently in the market, and aware of new developments in compatibilizer technologies, we developed SIG Terra RecShield D laminate for bag-in-box, a 3-layer, biaxially-oriented nylon laminate with the addition of a nylon compatibilizer. The compatibilizer enables recyclability by reducing the size of the nylon domains in the polyethylene matrix. The smaller the domains, the less impact these have on processability, appearance, and properties of the film made after reprocessing, thus enabling recyclability. The ability to reprocess back into a blown film, not only the laminate but the entire bag-in-box package, including the closure and the evacuation device, was validated by third-party testing at PFE and recognized by APR. The breakthrough of this innovation is that circular recyclability can be achieved without compromising package robustness throughout conversion, filling, and distribution."

Glenn Wiechman, Global Business Line Vice President, Bag-in-Box at SIG, echoed the team: "Beyond North America, designing for recyclability is a focus for us and our customers around the world. As it stands, bag-in-box already provides a myriad of benefits around product and packaging waste reduction, so we're thrilled to announce a solution that furthers us on the journey towards packaging for better."

The SIG Terra RecShield D bag-in-box package was evaluated using the most stringent, industry-accepted criteria that encompass a wide range of design features affecting plastics recycling. Design for recyclability can lead to less waste, more efficient use of limited natural resources, and increased supply of high-quality, post-consumer recycled content. Beyond recyclability, product and package waste reduction is a powerful step in carbon footprint mitigation. By reducing the amount of plastic required to get customer's liquids to their end-market, SIG packaging solutions help ensure that there is less product and package waste throughout the product lifecycle. This new flexible post-mix beverage concentrate packaging provides for recyclability where possible while also ensuring critical source reduction that saves our Earth's diminishing resources for future use.

SIG's recycle-ready bag-in-box packaging for beverage is now available.

About SIG

SIG is a leading solutions provider of packaging for better – better for our customers, for consumers, and for the world. With our unique portfolio of aseptic carton, bag-in-box, and spouted pouch, we work in partnership with our customers to bring food and beverage products to consumers around the world in a



safe, sustainable, and affordable way. Our technology and outstanding innovation capabilities enable us to provide our customers with versatile packaging systems and solutions for innovative products and smart operations, all to address the ever-changing needs of consumers. Sustainability is integral to our business and guides us on our journey to create packaging for better – packaging that gives more to people and the planet than it takes out.

Founded in 1853, SIG is headquartered in Neuhausen, Switzerland, and is listed on the SIX Swiss Exchange. The skills and experience of our approximately 9,000 employees worldwide enable us to respond quickly and effectively to the needs of our customers in over 100 countries. In 2023, SIG produced 53 billion packs and generated €3.2 billion in revenue. SIG also has an AA ESG rating by MSCI, a 13.9 (low risk) score by Sustainalytics, Platinum CSR rating by EcoVadis, and is included in the FTSE4Good Index. For more information, visit our website.

For insights into trends that drive the food and beverage industry, visit the SIG blog.

Picture caption:

SIG announced today that they have been formally recognized by the Association of Plastic Recyclers (APR) for meeting the highest criteria for recyclability according to the APR Design® Guide for Plastics Recyclability for SIG Terra RecShield D bag-in-box package for beverages such as post-mix syrup.

Photo: SIG

Your contact for media inquiries:

Heike Thevis Press Officer at SIG

Tel: +49 (0)2462 79 2608 Email: <u>heike.thevis@sig.biz</u>