

Press release

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Shift toward aluminum-layer free aseptic cartons in Europe

Now on shelves: SIG launches world's first aseptic 1-liter carton pack offering full barrier protection without an aluminum layer

SIG has launched the first 1-liter aseptic carton packs made of SIG Terra Alu-free + Full barrier packaging material, which are now available on shelves. It is the world's first full barrier packaging material for aseptic cartons without an aluminum layer, further reducing the already low carbon footprint of standard SIG carton packs.

Following the success of this packaging material innovation in the field of single-serve aseptic cartons, SIG is now expanding the alu-free option into the juice category and a multi-serve format for the first time. In a first step, ALDI will offer grape juice under its own brand Rio d'oro in this

innovative packaging solution in parts of Germany, thereby reducing the carbon footprint of conventional multi-serve cartons by 29%¹. The products are produced and filled at the Italian beverage and food producer Quargentan, utilizing its existing SIG Midi 12 Aseptic filling machine with full performance.

Globally available at scale

SIG Terra Alu-free + Full barrier offers the same full barrier protection as standard SIG aseptic carton material and the same shelf life of up to 12 months. The packaging material is available globally at scale and can seamlessly run on existing SIG filling lines, including high-speed capabilities of up to 24,000 packs per hour for small-size cartons and 15,000 packs per hour for multi-serve formats. With only minor adjustments required to existing filling machines, this is a plug-and-play solution for brands and manufacturers seeking to make a rapid transition. Customers also benefit from the renowned flexibility of the SIG filling lines. Switching between packaging material without an aluminum layer and standard packaging material is quick and easy at any time.

“At SIG, one of our goals is to increase the paper content in our aseptic cartons to at least 90% – including the closure – by 2030, allowing further reduction of carbon emissions, and creating a regenerative food packaging system. On the way there, we have developed this packaging structure that is made of more than 80% paper and reduces the number of raw materials from three to two”, said **José Matthijsse, President & General Manager Europe at SIG**. “This breakthrough innovation has the potential to streamline the recycling process for aseptic cartons, only requiring the separation of paperboard and polymers.”

Pioneering alu layer-free solutions

Removing the aluminum layer from aseptic cartons – traditionally used to protect oxygen-sensitive products like juice, plant-based drinks, or flavored milk – marks a milestone in the journey to create a regenerative food packaging system. This is a significant step in reducing the environmental impact. The SIG Terra Alu-free + Full barrier packaging material is made from more than 80% paper and replaces the aluminum layer with an ultra-thin polymer coating that protects products against oxygen, light, moisture, and aroma loss. This innovation cuts the number of raw materials from three to two and can lower the carbon footprint of multi-serve aseptic SIG cartons by up to 61%² when combined with forest-based polymers³ – without compromising full barrier function, shelf life or filling line performance.

SIG was the pioneer in its industry to introduce a packaging material without an aluminum layer for aseptic cartons in 2010 – developed for plain liquid dairy products. Since then, SIG has sold over 4 billion packs featuring no aluminum layer. Drawing on its extensive knowledge and experience, SIG has continued to grow its SIG Terra range of sustainable packaging innovations without aluminum.

¹ Result based on an independent ISO-compliant life-cycle assessment:

https://api.sig.biz/media/kripylrs/lca_sig-terra-alu-free-plus-full-barrier-and-sig-terra-alu-free-plus-full-barrier-plus-forest-based-polymers-for-sig-midibloc-and-sig-midifit-germany.pdf

² Result based on an independent ISO-compliant life-cycle assessment:

https://api.sig.biz/media/kripylrs/lca_sig-terra-alu-free-plus-full-barrier-and-sig-terra-alu-free-plus-full-barrier-plus-forest-based-polymers-for-sig-midibloc-and-sig-midifit-germany.pdf

³ via a certified mass-balance system

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 end-to-end solutions for differentiated products, smarter factories, and connected packs, all to address the ever-changing needs of consumers. Sustainability is integral to our business, and we strive to create a regenerative food packaging system.

Founded in 1853, SIG is headquartered in Neuhausen, Switzerland, and listed at the SIX Swiss Exchange. The skills and experience of our approximately 9,600 employees worldwide enable us to respond quickly and effectively to the needs of our customers in over 100 countries. In 2024, SIG produced 57 billion packs and generated €3.3 billion in revenue. SIG also has an AAA ESG rating by MSCI, a Platinum CSR rating by EcoVadis, and is included in the FTSE4Good Index. For more information, visit www.sig.biz

Picture caption:

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Photo: SIG

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