

## Press release

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# SIG launches world's-first alu layer-free full barrier solution for multi-serve aseptic cartons, further reducing carbon footprint by up to 61%

- World's first alu-layer-free full-barrier packaging material for multi-serve aseptic cartons
- CO<sub>2</sub> reduction by up to 61%<sup>1</sup>
- Full shelf life of up to 12 months
- "Plug-in" solution running on installed SIG filler base
- Full performance of up to 15,000 packs per hour for multi-serve cartons
- Available at scale to customers around the world

SIG, the pioneer of aseptic carton packaging without aluminum layer, announces the commercial launch of another industry-first: SIG Terra Alu-free + Full barrier for multi-serve aseptic cartons. Building on the success of this groundbreaking packaging material innovation in the field of single-

serve cartons – with over 300 million packs sold in China since 2023 – SIG is scaling up the world's first, aluminum-layer-free full-barrier packaging material to multi-serve aseptic cartons and ready to provide it at scale to customers around the globe.

The groundbreaking packaging structure for multi-serve cartons with no aluminum layer cuts the carbon footprint of SIG's standard aseptic cartons by up to 61%<sup>1</sup> when combined with forest-based polymers<sup>2</sup>. Made of more than 80% paper, the material simplifies the packaging structure to only two main raw materials, that can all be linked to renewable sources.

### **Performance and compatibility**

The packaging material offers the same full barrier protection as standard aseptic cartons and the same full shelf life of up to 12 months. It can seamlessly run on existing SIG carton filling lines with full performance including high-speed of up to 24,000 packs per hour on SIG filling lines for small-size cartons and up to 15,000 packs per hour on filling lines for multi-serve cartons with only minor, low-cost adaptations. The plug-and-play solution is enabling SIG customers worldwide to make use of the additional environmental benefits that come with the alu layer-free full barrier packaging material suitable for a wide range of beverages without compromising product quality or production performance.

“At SIG, we are leading the industry transition to alu-layer-free aseptic carton packaging materials. With our full barrier material with no aluminum layer, we are offering a powerful differentiator and embodiment of sustainability in aseptic carton packaging, unlocking new opportunities for packaging sensitive product categories such as plant-based products, juices, and nutritional beverages. As a result, our SIG Terra portfolio now offers an aseptic carton solution without aluminum layer for all product categories we serve, without compromising on shelf life”, said **Christoph Wegener, Chief Markets Officer at SIG**.

### **Simplifying packaging structures**

Decarbonizing the food and beverage industry is more important than ever. In aseptic cartons, an aluminum layer is traditionally used to protect food and beverage products from oxygen and light. Although aluminum accounts for just around 5% of a standard aseptic carton, it accounts for up to 25% of its carbon footprint in a full-barrier package. Removing the aluminum layer is a significant step in reducing the already low carbon footprint of standard SIG aseptic cartons even further and simplifies the packaging structure from 3 to just 2 main raw materials, thereby increasing the share of paper to over 80%.

### **Pioneering the industry**

SIG is the pioneer in its industry and introduced a packaging material without an aluminum layer for aseptic cartons in 2010: SIG Terra Alu-free – developed for plain liquid dairy products. Drawing on its extensive knowledge and experience with alu-layer-free structures and building on the success of SIG Terra Alu-free, the company has continued to grow its aluminum-layer-free aseptic carton portfolio – with every solution reducing the already low carbon footprint of standard SIG aseptic cartons even further. With SIG Terra Alu-free + Full barrier SIG expanded the alu layer-free options for wider use with oxygen-sensitive products such as fruit juices, nectars, flavored milk or plant-based beverages. SIG aims to roll out SIG Terra Alu-free + Full barrier to all flagship aseptic carton formats, both small-size and multi-serve, suitable for all beverage and dairy categories step by step.

Since launching the first alu-layer-free aseptic carton in 2010, SIG has sold over 4 billion packs featuring no aluminum layer, including 300 million alu-free full-barrier cartons. These milestones reinforce SIG's leadership in sustainable aseptic packaging.

**Gavin Steiner, Chief Technology Officer at SIG:** “Sustainability is integral to our business, and we strive to create a regenerative food packaging system. Looking ahead, SIG plans to raise the paper content in its aseptic cartons to at least 90% including closures by 2030, with an interim target of 85% without closure this year – further boosting renewability, lowering carbon footprints, and with the potential to streamline the recycling process for aseptic cartons, only requiring the separation of paperboard and polymers.”

<sup>1</sup> based on an independent ISO-compliant life-cycle assessment: [https://api.sig.biz/media/0dhjrkj1/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.pdf](https://api.sig.biz/media/0dhjrkj1/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.pdf)

<sup>2</sup> 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](http://www.sig.biz)

## Picture Caption:

SIG, the pioneer of aseptic carton packaging without aluminum layer, announces the commercial launch of another industry-first: SIG Terra Alu-free + Full barrier for multi-serve aseptic cartons. Building on the success of this groundbreaking packaging material innovation in the field of single-serve cartons – with over 300 million packs sold in China since 2023 – SIG is scaling up the world’s first, aluminum-layer-free full-barrier packaging material to multi-serve aseptic cartons and ready to provide it at scale to customers around the globe.

**Photo: SIG**

Your contact for media inquiries:

**Heike Thevis**

Press Officer at SIG

Tel: +49 (0)2462 79 2608

Email: [heike.thevis@sig.biz](mailto:heike.thevis@sig.biz)