

PRESS RELEASE

Product

FreshSafe PET® from KHS: Association of Plastic Recyclers recognizes recyclability achievement

- Technology combines product protection with recyclability
- Better barrier properties than composite materials
- Growing demand for clean recycling systems for PET bottles

Dortmund/Hamburg, March 26, 2019 – The public demand for more sustainability is growing stronger. As a result the industry is increasingly concentrating on the recyclability of PET bottles. However, this type of packaging often contains composite materials which considerably hinder simple, pure-grade recycling. KHS' FreshSafe PET® technology offers the beverage and food industries a unique alternative. A wafer-thin protective layer of chemically pure glass on the inside wall of the PET container combines product protection with full bottle-to-bottle recycling. This has now been officially acknowledged by North America's Association of Plastic Recyclers (APR): this recognizes PET bottles coated using Plasmax barrier technology as meeting or exceeding APR's most stringent Critical Guidance criteria for recyclability.

"Plastics are being subjected to increasingly critical questioning. People want more sustainable solutions from the industry," says Jon Elward, head of Plastic Packaging at KHS USA, Inc. "The demand for clean recycling systems in particular is steadily gaining in significance." The gradual ousting of mixed material PET bottles which are hard to recycle is progressively opening up the market to packaging systems which are easy



to recycle. In this context KHS' FreshSafe PET® technology provides a suitable alternative and has now been classified as meeting APR's [1] most stringent Critical Guidance criteria for recycling. The wafer-thin glass coating applied to the inside wall of the bottle is washed off during the recycling process, producing pure PET. "We've fully satisfied the strict specifications and critical demands of the recognition process," states Elward. "This again proves that FreshSafe PET® is the only sustainable technology on the market and a reference for the recyclability of PET bottles without composite materials." With it sensitive products such as juice, wine, sauce and liquid food are protected from oxidation and carbonated beverages from carbon dioxide loss. Furthermore, compared to standard composite materials the coating process provides a much better barrier quality and ensures much longer product shelf lives.

APR aims to improve recycling quality of PET bottles

"This technology considerably facilitates recycling and at the same time improves the barrier properties of PET bottles," confirms Steve Alexander, executive director of the APR. Through its recognition program the organization aims to improve the recycling quality of plastic bottles. According to Elward, interest among bottlers is growing in the system which has already been tried and tested many times over on the market. "There is an increasing demand for sustainable packaging." With the

^[1] The Association of Plastic Recyclers is a North American trade association which strongly advocates the recycling of all post-consumer plastic packaging. To this end the association draws up design guidelines and recognizes packaging design innovations that meet its most stringent guidance criteria for recyclability, among other things.



recognition issued by the APR bottlers and recyclers can be more confident the technology supports the American PET recycling market. "This is a significant step in further establishing this technology," Elward believes.

The EPBP¹ also gives FreshSafe PET® top marks. In its design guidelines the platform rates the materials used with regard to their recyclability using a traffic light system. The SiO_x coating is described as being the only fully compatible barrier technology.

KHS calculates individual TCO

Beverage producers of course incur additional overheads when they invest in FreshSafe PET® yet these quickly pay off as the overall operating costs at the plant are reduced. When they use this system bottlers can switch to less expensive standard PET preforms, relieving them of the obligation to source preforms from a specific manufacturer. KHS offers plant operators an individual consideration of the total costs accrued when using its barrier coating technology. "Measured against the huge benefit of additional product protection and longer product shelf lives in particular, the costs per bottle are actually lower than when conventional composite materials are used," smiles Elward.

¹The European PET Bottle Platform is a voluntary industry initiative that provides PET bottle design guidelines for recycling.



For more information go to: www.khs.com/en/media

Subscribe to our newsletter at:

http://www.khs.com/en/media/publications/newsletter.html

Picture captions for the press release

(Picture source: KHS)

FreshSafe PET®: a wafer-thin layer of glass on the inside wall of the PET bottle combines product protection with the option of full bottle-to-bottle recycling.

Jon Elward: Jon Elward, head of Plastic Packaging at KHS USA, Inc.

Fully recyclable (Picture source: APR): PET bottles coated using Plasmax barrier technology have been classed as being 100% recyclable by the Association of Plastic Recyclers (APR).



About the Association of Plastic Recyclers

The Association of Plastic Recyclers is a national trade association which represents interest groups in plastics processing. Its members include independent recycling companies of all sizes, manufacturers of consumer goods, bottlers and engineering companies. The APR strongly advocates the recycling of all post-consumer plastic packaging and aims to promote the development of the plastics recycling industry. To this end the association draws up design guidelines and recognizes packaging design innovations that meet its most stringent guidance criteria for recyclability, among other things. It also strives to strengthen cooperation with the retail trade.

About KHS GmbH

KHS GmbH is one of the leading manufacturers of filling and packaging systems for the beverage, food and non-food industries. The KHS Group includes the following companies: KHS GmbH, KHS Corpoplast GmbH, NMP Systems GmbH and numerous subsidiaries outside Germany located in Ahmedabad (India), Sarasota and Waukesha (USA), Zinacantepec (Mexico), São Paulo (Brazil) und Suzhou (China).

KHS GmbH manufactures modern filling and packaging systems for the high-capacity range at its headquarters in Dortmund, Germany, and at its factories in Bad Kreuznach, Kleve and Worms. The group's PET expertise is pooled at KHS Corpoplast GmbH in Hamburg, Germany, where innovative PET packaging and coating systems are developed and produced. NMP Systems GmbH based in Kleve in Germany designs and markets new, resource-saving packaging systems. KHS is a wholly owned subsidiary of the SDAX-listed Salzgitter AG corporation. In 2017 the KHS Group and its 5,070 employees achieved a turnover of around €1.137 billion.



Contact for journalists

Sebastian Deppe Sputnik GmbH Press and PR Hafenweg 9 48155 Münster Germany

Phone: +49 251 6255 61243 Fax: +49 251 6255 6119 deppe@sputnik-agentur.de www.sputnik-agentur.de

Contact for publishers' representatives

Eileen Rossmann Mediaberatung Rotebühlplatz 23 (City Plaza) 70178 Stuttgart Germany Phone: +49 711 26877 656

Phone: +49 711 26877 656 Fax: +49 711 26877 699

eileen.rossmann@mmb-media.de

www.mmbmedia.de