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PRESS RELEASE

ILLIG and SÜDPACK present certified compostable, bio-based food containers

- **Thermoformed containers with heat-sealable lids especially suitable for vegetarian and vegan foods and dairy products**

Heilbronn and Ochsenhausen, July 22, 2021 – *In a cooperative project, SÜDPACK Verpackungen and ILLIG Maschinenbau have developed thermoformed food packaging with components that are certified compostable and predominantly bio-based. The tray with heat-sealable lid can be used to package vegetarian and vegan foods, as well as dairy products such as yogurt or cheese. It is made of a certified compostable (DIN EN 13432) and partially bio-based plastic ecovio®, which was dyed green for this application. SÜDPACK produced the film in an extrusion process and developed the laminate lidding film, which is also industrially compostable. ILLIG designed the thermoforming tool, thermoformed the trays from the film and sealed the lid. The result is a thin-walled food container that replicates the mold's shape in detail and can be produced at the same speed as similar packaging made from conventional plastics.*

This collaborative project demonstrates that thermoformed packaging based on certified compostable materials is possible under current market conditions. It follows the increasing trend and demand for compostable and bio-based packaging solutions in more and more countries. In particular, food packaging with organic remnants is difficult to process in conventional mechanical recycling processes. In such applications, industrially compostable containers are a viable alternative where the appropriate infrastructure for composting exists. In this way, the food scraps, including the packaging, can be sent for organic recycling instead of thermal recycling. The ecovio®

bioplastic used for this case study has been specially optimized for film extrusion with subsequent thermoforming. It can be processed on standard mono- or co-extrusion machines into films with or without an additional oxygen barrier. The bioplastic has a high heat deflection temperature up to 95° C, is approved for contact with foodstuffs and has mechanical properties similar to those of polypropylene (PP).

Technically flawless solution

"Together with ILLIG, a leading global manufacturer of thermoforming and tooling systems, we were able to demonstrate that films made from ecovio® material can not only be produced effectively on common extrusion lines, but also show excellent properties when processed on thermoforming lines," says Dr. Jürgen Betz, responsible for R&D Extrusion at SÜDPACK. The flexible film developed by SÜDPACK for the lid consists of a multilayer, partially transparent laminate based on polylactic acid (PLA) and brown paper. All components are industrially compostable according to DIN EN 13432. The film is heat-sealable with other PLA-based materials and can also be optionally equipped with a barrier layer.

"With our joint project approach, we demonstrate how certified compostable and bio-based plastics can be easily thermoformed and further processed on standard machines," says Sven Engelmann, head of the ILLIG Technology Center ITC and packaging development at ILLIG in Heilbronn. "We were able to run the same machine speed as with polypropylene. In particular, our thermoforming tool reproduces the lettering 'Vegan Burger' embedded in the bottom of the tray with great detail. This opens up numerous design possibilities for thermoformed, industrially compostable packaging."

With the cooperation project, ILLIG and SÜDPACK are demonstrating ecologically interesting solutions for packaging manufacturers and thus shaping the future sustainably.

Note: ecovio® is a registered trademark of BASF.

About ILLIG

ILLIG is a leading global supplier of thermoforming systems and tool systems for thermoplastics and cardboard. The company's product and services portfolio includes the development, design, manufacture, installation and commissioning of complex production lines and components. With the unique packaging development, "Pactivity® 360", and the high-performance packaging systems, ILLIG supplies its customers with resource-friendly and sustainable solutions, and supports packaging manufacturers in design for recycling. With its own subsidiaries and sales agencies in over 80 countries, ILLIG is locally present in all markets around the globe. For 75 years, the family business has been serving its customers across the globe as a reliable partner for the cost-effective manufacturing of complex precision parts with innovative technology of unsurpassed quality and comprehensive global service.

About SÜDPACK

SÜDPACK is a leading producer of high-tech films and packaging materials for food, non-food and medical applications, offering maximum product protection as well as optimized material efficiency and functionality.

The privately-owned company is based in Ochsenhausen and was founded in 1964 by Alfred Remmele. Its production sites in Germany, France, Poland, Switzerland, the Netherlands and the United States are equipped with latest state-of-the-art technology and manufacture according to the most demanding standards, also including clean-room conditions. With its world-wide sales and service network, the company ensures a high proximity to its customers as well as a sophisticated technical application support in more than 70 countries. At its Innovation Centre in Ochsenhausen the research-focused company provides its customers an optimal platform for application testing and the development of customized solutions.

SÜDPACK is highly committed to a sustainable development and assumes its responsibility as employer, towards the society and the environment as well as its customers by offering the most efficient and sustainable packaging solutions. Further information at www.suedpack.com.

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Pictures: ILLIG

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Industrial compostable thermoformed containers with heat-sealable lids, especially suitable for vegetarian and vegan foods and dairy products.

