**Press release**

**A resounding success: exclusive informative event held by SÜDPACK and CARBOLIQ on chemical recycling**

**With its cooperation partners, SÜDPACK has prepared the way for a functioning circular economy. On 15 February, a select group of journalists was given the opportunity to tour the CARBOLIQ plant in Ennigerloh near Münster, which is unique in the industry as the only plant in fully continuous operation. Experts from both companies as well as entrepreneur Johannes Remmele were available to answer questions during the press conference – and there was a particular focus on the facts surrounding chemical recycling.**

When it comes to introducing a circular economy in the packaging industry, scarcely any other topic generates as much controversy as the technology of chemical recycling. And yet it is made clear by more than the top-class event in Ennigerloh: As an addition to mechanical recycling, the process can make a significant contribution to closing further recycle waste streams, for example for flexible multilayer films that have not been recyclable until now, and to achieving mandatory recycling rates.

**CARBOLIQ technology …**

… is to be classified as a material recycling process with regard to its use as a process for waste treatment, explained Christian Haupts, Managing Director of CARBOLIQ GmbH, during his talk and the tour of the plant. It is an advanced thermo-chemical process that is also called direct oiling. What CARBOLIQ has in common with known methods of gasification and pyrolysis is that solid organic input materials (plastics and biomass) are converted into oils and gases by breaking down (cracking) their hydrocarbon chains.

What differentiates the process significantly, however, is its flexibility in terms of infeed materials, which do not have to be based on polyolefin. Thanks to its high feedstock tolerance, CARBOLIQ is suitable for contaminated, mixed and other plastics as well as for flexible packaging and highly complex multilayer films made of several types of plastic. This means when compared to mechanical recycling, the process offers far more options because it aims to recover recyclable components by means of thermal decomposition.

Another advantage is that the process requires a lower temperature of less than 400°C. This rules out coking and toxic pyrolysis gases are not produced. The low temperature, the single-stage approach of the process and the use of friction to introduce energy to the material make it possible to convert material with relatively low energy consumption. As soon as the energy that is needed to run the plant is obtained from renewable sources, the CARBOLIQ process will be fully climate neutral. Neither the process nor the energy used emit CO2.

The CARBOLIQ plant concept is – based on the use of high-caloric fractions and fully continuous operation (7,200 hours/year) – designed to provide an annual output of 10,000 tons of liquid resources per plant. The secondary raw material distributed by CARBOLIQ under the name of CLR (Circular Liquid Resource) is similar in many of its main properties to fossil oil and the products obtained from it – which makes it a fully-fledged substitute for fossil resources. It can be processed in the existing plants of the refinery/petrochemical industry, can be mixed with fossil oils and is just as suitable for storage.

**Additional highlights of the exclusive event**

Before Christian Haupts covered the CARBOLIQ technology in detail at the press conference, Valeska Haux, Vice President Strategic Marketing at SÜDPACK, presented the sustainability strategy of the company group. Dirk Hardow, Head of the FF&C (Functional Films & Compounds) business unit, on the other hand, highlighted the framework conditions for the implementation of chemical recycling and used a model calculation to outline the positive impact of recycling on the carbon footprint of plastics.

Accordingly, plastics that have been mechanically recycled and processed into granules have a carbon footprint that is 98 percent lower than granules manufactured from virgin material. When virgin material is compared to material from chemical recycling for the manufacturing of granules, the result is a carbon savings of more than 20 percent. Both observations, however, do not take into consideration that the material that is obtained from chemical recycling would have otherwise been thermally recycled, which emits additional CO2. Another advantage is that the longer the material is kept in the loop, in other words the more often the material is recycled, the further the carbon footprint decreases.

Johannes Remmele, entrepreneur and owner of the SÜDPACK Group, provided information about the “ZERO WASTE” vision, about the reasons for cooperation with CARBOLIQ and about the commitment of the family business to implementing the process as a complementary recycling technology. His credo: despite all sustainability efforts, there will continue to be materials whose structure is composed of different polymers. These structures will continue to be indispensable for many applications in the future – and are simultaneously the most material-efficient way to produce the desired functionality of packaging. Because these properties cannot be replaced with monostructures in a material-efficient manner with current technology, suitable recycling technology for these materials is necessary so that these fractions can be kept in a loop and do not have to be thermally recycled.

**In conclusion …**

The conversion of plastic fractions that are not currently recyclable and of post-consumer and post-industrial waste into a valuable resource is not a utopian dream, but is already a reality. Moreover, SÜDPACK is the only manufacturer of flexible films with direct access to capacities for chemical recycling. In addition, in combination with the Schwendi site where capacities for the mechanical processing of recyclables are available, SÜDPACK is now always able to apply the technology that is the best choice in terms of environmental impact and economic profitability when closing recyclable material cycles. This is a striking difference between the company group and its market competitors and makes SÜDPACK the market leader in this future-oriented field.

**About SÜDPACK**

SÜDPACK is a leading manufacturer of high-performance films and packaging materials for the food, non-food and medical goods industries. Our solutions ensure maximum product protection as well as additional pioneering features with minimum material input.

The family business, which was founded by Alfred Remmele in 1964, is headquartered in Ochsenhausen. The production sites in Germany, France, Poland, Switzerland, the Netherlands and the USA are equipped with the latest plant technology and manufacture to the highest standards, including the capacity to operate under clean room conditions. The global sales and service network ensures a high degree of proximity to the customer and comprehensive application technology support in more than 70 countries.

With its state-of-the-art Development and Application Center at its headquarters in Ochsenhausen, the innovation-oriented company offers its customers an optimal platform for carrying out application tests and for developing individual and tailor-made solutions.

SÜDPACK is committed to sustainable development and fulfills its responsibility as an employer and towards society, the environment, and its customers by developing packaging solutions that are highly efficient and sustainable.

[www.suedpack.com](http://www.suedpack.com)

**About CARBOLIQ**

CARBOLIQ GmbH is based in Remscheid and is the technology platform of RECENSO. It is responsible for the business area regeneration of hydrocarbons in waste streams. The company manufactures and operates plants for oil recovery from mixed and contaminated plastic wastes. CARBOLIQ supplies the CLR (circular liquid resource) it produces to the petrochemical industry, which uses it as a substitute for fossil raw materials in the manufacture of new, high-end polymers.

www.carboliq.com

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