



Press Release

Leverkusen,
October 7, 2015

Covestro
Deutschland AG
Communications
51365 Leverkusen
Germany

Contact
Dr. Frank Rothbarth
Telephone
+49 214 6009 2536
Email
frank.rothbarth
@covestro.com

New partnership for plastics from renewable raw materials

Covestro and Reverdia develop bio-based TPU

Improved carbon footprint along the process chain

Covestro, formerly Bayer MaterialScience, and Reverdia have reached an agreement to jointly develop and promote thermoplastic polyurethanes (TPU) based on renewable raw materials. Covestro will employ Biosuccinium™ succinic acid from Reverdia for the production of its Desmopan® brand TPU for use in a variety of applications, including in the footwear and consumer electronics industries.

Biosuccinium™, produced at commercial scale since 2012 using Reverdia's patented low-pH yeast technology, allows Covestro to capitalize on years of research. The company plans to expand its bio-based TPU production in Taiwan to industrial scale.

High bio-mass content

Bio-based Desmopan® products are already available in various hardness grades, including 85 Shore A, 95A and 60D. They match the excellent physical properties of conventional grades while also providing a better carbon footprint along the value-added chain. Simulations by Reverdia suggest a roughly 65 percent reduction in the carbon impact compared with products produced with petrochemicals. The biomass content of the Desmopan® TPU in the aforementioned hardness grades is 65 percent (85 Shore A), 52 percent (95A) and 42 percent (60D).

“Our customers in the footwear and consumer electronics industries are constantly looking for new solutions to reduce their CO₂ footprint, and bio-based TPU from Covestro is one such solution,” said Marius Wirtz, Global Head of the



TPU business. “We are looking forward to working with Reverdia to bring these modern materials to the market.”

Reverdia President Marcel Lubben said, “We value our partnership with Covestro and see it as a long-term investment by both parties with the aim to jointly develop bio-based materials for both industries. These applications, which have now reached industrial scale, underscore the good properties of Biosuccinium™ and its potential to improve the climate balance of consumer products. Reverdia’s yeast process has thus proved to be a particularly sustainable method for the production of bio-based succinic acid.

About Covestro:

With 2014 sales of EUR 11.7 billion, Covestro is among the world’s largest polymer companies. Business activities are focused on the manufacture of high-tech polymer materials and the development of innovative solutions for products used in many areas of daily life. The main segments served are the automotive, electrical and electronics, construction and sports and leisure industries. The Covestro group has 30 production sites around the globe and employed approximately 14,200 people at the end of 2014. Covestro, formerly Bayer MaterialScience, is a Bayer Group company.

About Reverdia:

Reverdia is the joint venture between Royal DSM, the global Life Sciences and Materials Sciences company, and Roquette Frères, the global starch and starch-derivatives company. Reverdia takes a leadership position and leverages the expertise and experience of DSM and Roquette to produce, market and license Biosuccinium™.

Find more information at www.reverdia.com.

This press release is available for download from the Covestro press server at www.covestro.com.

Find more information at www.covestro.com.
ro (2015-020E)

Contacts:

Covestro:

Dr. Frank Rothbarth, Tel. +49 214 6009 2536

E-Mail: frank.rothbarth@covestro.com

Reverdia:

Kathryn Sheridan

Tel. Europe: +32 496 116198

Tel. North America: +1 (202) 470 3239

E-Mail: ks@sustainabilityconsult.com



Forward-Looking Statements

This release may contain forward-looking statements based on current assumptions and forecasts made by Covestro Deutschland AG. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Covestro's public reports which are available at www.covestro.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.