

Press Release



Leverkusen,
March 24, 2022

Another milestone on the way to climate neutrality

Covestro pioneers the supply of renewable¹ TDI

Covestro AG
Communications
51365 Leverkusen
Germany

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

Contact
Carolin Mann
Telephone
+49 173 7944436
Email
carolin.mann
@covestro.com

- **For more sustainable mattresses, upholstered furniture, shoes and automotive seats**
- **Significant reduction of CO₂ emissions from cradle-to-gate²**
- **Rapidly implementable solution with consistently high quality**

[Covestro](#) is again expanding its range of more circular raw materials and now offers customers in various regions renewable toluene diisocyanate (TDI) which provides a significant reduction of the CO₂ footprint from cradle to factory gate² – with the same high quality as fossil-based products. TDI is an important raw material for flexible polyurethane foam, and provides a high level of comfort in mattresses and upholstered furniture, but also in car seats and shoes. Covestro manufactures the renewable TDI both in Dormagen, Germany, and in Caojing, China, using the mass balance method. Both sites are certified according to the ISCC PLUS standard.

For Covestro, offering renewable TDI via mass balance is only a logical next step of making this important chemical raw material even more sustainable, as Dr. Klaus Schäfer, Chief Technology Officer of Covestro, explains: "Already years ago, our unique gas phase technology was a milestone towards more energy efficiency in the production of TDI. After that we committed ourselves to ensure a further reduction in emissions from our production by switching to green electricity. This additional improvement now makes it clear how

¹ The renewable TDI is produced with the help of the mass balance approach using renewable raw materials - from virgin biomass and bio waste and residues - which are mathematically attributed to the product.

² According to an internal assessment of a partial product life cycle from raw material extraction (cradle) to the factory gate (of Covestro), also known as cradle-to-gate assessment. The methodology of our LCA is based on the ISO 14040 and 14044 standards. The calculation takes into account the biological origin of the carbon based on preliminary data from the supply chain. No compensation measures were applied.



consistently we are pursuing our path to climate-neutral production³ and the circular economy: By using mass-balanced renewable raw materials, we are now also striving to significantly reduce our indirect emissions in the supply chain and to offer products with a reduced carbon footprint."

"With our shift to mass-balanced products, we are helping customers in various industries achieve their climate targets and drive the transition to a circular economy," says Sucheta Govil, Chief Commercial Officer of Covestro. "At the same time, we are strengthening the use of alternative raw materials and reducing CO₂ emissions along various value chains." Customers can use this TDI as a drop-in solution, meaning it can be implemented rapidly and easily in existing production processes without the need for technical modification.

Flexible PU foams made with TDI and long-chain polyols are important materials in the manufacture of seat cushions and mattresses. Renewable TDI meets demands for more sustainable production while ensuring the good quality, optimal comfort and high breathability known from fossil-based TDI. It also meets the expectations of the automotive industry, which is looking for alternative raw materials for car seat cushions with a lower carbon footprint.

Sinomax as pioneer for more sustainability

Only late last year, Covestro signed its first commercial supply contract with Sinomax, a global manufacturer and distributor of polyurethane comfort products based in China. Both companies share a clear commitment toward the circular economy, and Sinomax wants to be the first customer to use the new TDI to reduce its CO₂ emissions. The mass-balanced TDI required for this is supplied by the ISCC PLUS-certified Shanghai site of Covestro. Thanks to its global presence, the company can also supply larger amounts of mass-balanced TDI.

In this mass balance approach, raw materials derived from biomass or waste are fed in at an early stage of raw material extraction and mathematically attributed to the finished products. This saves fossil raw materials and reduces greenhouse gas emissions, while the quality of the mass-balanced products remains the same compared to purely fossil-based ones. Manufacturers can continue to use their proven formulations, equipment and processes, meanwhile gradually transforming their product portfolio towards a more sustainable one and achieving their climate targets.

About Covestro:

³ The term "climate-neutral production" refers to the Covestro target of reducing scope 1 and scope 2 emissions to zero by 2035.



Covestro is one of the world's leading manufacturers of high-quality polymer materials and their components. With its innovative products, processes and methods, the company helps enhance sustainability and the quality of life in many areas. Covestro supplies customers around the world in key industries such as mobility, building and living, as well as the electrical and electronics sector. In addition, polymers from Covestro are also used in sectors such as sports and leisure, cosmetics and health, as well as in the chemical industry itself.

The company is committed to becoming fully circular and aims to become climate neutral by 2035 (scope 1 and 2). Covestro generated sales of around EUR 15.9 billion in fiscal 2021. At the end of 2021, the company had 50 production sites worldwide and employed approximately 17,900 people (calculated as full-time equivalents).

Forward-looking statements

This news release may contain forward-looking statements based on current assumptions and forecasts made by Covestro 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.