

Press Release



Leverkusen,
July 2, 2020

Covestro AG
Communications
51365 Leverkusen,
Germany

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

Flat tires are now a thing of the past

Non-stop cycling fun with airless tire inserts

Air Fom makes use of expanded TPU from Covestro

The warmer weather and more relaxed corona restrictions are drawing people outside – and more and more of them onto their bikes. There are plenty of reasons for this: exercise and fitness, fresh air and the opportunity to get out of the house or to avoid having to wear masks on public transport. Going shopping by bike or exploring one's surroundings could be a joy if it weren't for the many stones, shards of glass, nails and other sharp objects that will turn a perfectly good tire into a flat mess. The Taiwanese company [Air Fom](#) is now offering a patented solution for airless tires that overcomes the drawbacks of previous airless products. It is based on an expanded thermoplastic polyurethane (eTPU) from [Covestro](#).

Solid rubber tires have been on the market for quite a while now, but just like earlier puncture-proof products, they have their shortcomings: they do not produce the typically light driving feel of their air-filled counterparts, are often real heavyweights and, moreover, are very expensive. Today's bicycles often have highly complex superstructures, such as sports bikes with multi-speed transmissions or e-bikes. Their assembly therefore requires time and some skill – a true nightmare for bicycle rental companies. Moreover, the plastics that have been used up to now are often not recyclable and therefore do not represent a permanent solution.

Light, elastic, maintenance-free, recyclable

Air Fom is now using a special technology combined with an innovative material. With the help of particle foam casting, expanded TPU is molded into the specified shape and exhibits precisely the desired properties on the rim. The tire insert is just as lightweight and elastic as an air-filled tire, can be fitted quickly



and firmly on standard rims, is maintenance-free and, most importantly, recyclable – unlike the butyl rubber tubes that are used in conventional tires. The material solution can also benefit bicycle rental companies for whom a constant operational readiness of their vehicles is important. The independent ACT Lab LLC confirmed that the product meets the latest safety requirements for use in bicycles. For its innovative development, Air Fom was recently awarded the Gold Medal of the prestigious Edison Award in the Transportation/Personal Mobility category.

About Covestro:

With sales of EUR 12.4 billion in 2019, 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 industries served are the automotive, construction, wood processing and furniture, and electrical and electronics industries. Other sectors include sports and leisure, cosmetics, healthcare and the chemical industry itself. Covestro has 30 production sites worldwide and employs approximately 17,200 people (calculated as full-time equivalents) as of the end of 2019.

This press release is available for download from the Covestro press server at www.covestro.com. Photos are available there for download as well. Please acknowledge the source of any pictures used.

For more information please see www.covestro.com.

Follow us on Twitter: <https://twitter.com/covestro>

ro (2020-044E)

Forward-looking statements

This press 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. These reports are available at www.covestro.com. The company assumes no liability whatsoever to update these forward-looking statements or to make them conform to future events or developments.