

From the road to the track: VESTAMID® eCO gives scrap tires a new life in athletic shoes

1 September 2022

- Replacement of 50 percent raw material with used tires
- Produced exclusively with renewable energy
- More than 40 percent less CO₂

Main press contact

Isabel Ramor
Head of Market Communications
High Performance Polymers
Phone + 49 2365 49-9878
isabel.ramor@evonik.com

Alternative press contact

Nina Peck
Head of Market Communications
Smart Materials
Phone +49 201 177-2223
nina.peck@evonik.com

Essen, Germany. Evonik is introducing a new sustainable high-performance plastic to its eCO product line. In the production of the polyamide 12 elastomer (PEBA) VESTAMID® eCO E40, 50 percent of fossil raw materials are saved and replaced by a starting material obtained from chemical recycling of used tires. In addition, only renewable energy is used in production, which reduces the carbon footprint by a total of 42 percent. Evonik will present VESTAMID® eCO and its other sustainable plastic materials under the motto "Next generation plastic solutions" at this year's K trade show in Düsseldorf, Germany, October 19–26, at booth B28 in hall 6.

Circular raw material

VESTAMID® eCO E40, like its classically produced counterpart VESTAMID® E40, is a thermoplastic elastomer from the polyether block amide family with consistently high quality. PEBA molding compounds have been valued by well-known sporting goods manufacturers for more than 40 years and are used, for example, in sports shoe soles. The new product name eCO reinforces Evonik's goal of reducing greenhouse gas carbon dioxide in production by using renewable or circular raw materials—in this case, raw materials from used tires that would otherwise end up in landfills or used thermally. This is achieved through the mass balance approach (further information: Mass Balance Approach VESTAMID® eCO). The method enables an immediate reduction of CO₂ in existing plants and does not change the quality of the products in any way.

Evonik Industries AG
Rellinghauser Straße 1–11
45128 Essen
Germany
Phone +49 201 177-01
www.evonik.com

Supervisory Board
Bernd Tönjes, Chairman
Executive Board
Christian Kullmann, Chairman
Dr. Harald Schwager, Deputy Chairman
Thomas Wessel, Ute Wolf

Registered Office is Essen
Register Court Essen Local Court
Commercial Registry B 19474

VESTAMID® eCO E40 is, without any restrictions, an immediate alternative with improved eco-balance for the long-established conventional molding compound for sports shoe soles with high resilience. The soles exhibit excellent low-temperature impact strength, chemical resistance and high elasticity, and are easy to color, process and overmold. Like the molding compounds of the VESTAMID® PEBA range, which have proven themselves for more than four decades, they can also be used in other demanding applications, such as in the automotive and medical technology industries.

Mass balance approach

In the mass balance method, the proportions of mixtures of fossil and renewable or circular raw materials are determined mathematically over the entire value chain during production and assigned to the products. A neutral body verifies this across all production stages and confirms the result in a certificate.

Caption:

In the production of VESTAMID® eCO E40, 50 percent of fossil raw materials are replaced by circular material from used tires. The proven performance properties of the material for sports shoe soles with high resilience, however, do not change.



Company information

Evonik is one of the world leaders in specialty chemicals. The company is active in more than 100 countries around the world and generated sales of €15 billion and an operating profit (adjusted EBITDA) of €2.38 billion in 2021. Evonik goes far beyond chemistry to create innovative, profitable and sustainable solutions for customers. About 33,000 employees work together for a common purpose: We want to improve life today and tomorrow.

About Smart Materials

The Smart Materials division includes businesses with innovative materials that enable resource-saving solutions and replace conventional materials. They are the smart answer to the major challenges of our time: environment, energy efficiency, urbanization, mobility and health. The Smart Materials division generated sales of €3.92 billion in 2021 with about 7,900 employees.

Disclaimer

In so far as forecasts or expectations are expressed in this press release or where our statements concern the future, these forecasts, expectations or statements may involve known or unknown risks and uncertainties. Actual results or developments may vary, depending on changes in the operating environment. Neither Evonik Industries AG nor its group companies assume an obligation to update the forecasts, expectations or statements contained in this release.