

# News Release

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## **Impact absorber made of BASF polyamide particle foam Ultramid® Expand receives the 2<sup>nd</sup> prize of the prestigious SPE Automotive Award**

- **Cooperation project between Mercedes-Benz and BASF wins 2<sup>nd</sup> prize of the prestigious innovation award for plastics technology in the “Enabler Technology” category**
- **Ultramid® Expand reduces the vehicle component’s weight and production costs**
- **The polyamide particle foam is ideal for demanding requirements in the automotive sector**

An impact absorber made of the polyamide particle foam Ultramid® Expand jointly developed by BASF and Mercedes-Benz for the Mercedes-Benz VISION EQXX technology program has won 2<sup>nd</sup> place in the "Enabler Technology" category at the SPE Automotive Awards 2024. SPE stands for Society of Plastics Engineers (Internationale Gesellschaft für Kunststofftechnik e.V.), which honors outstanding developments in plastic parts for vehicle engineering every year.

### **Component with weight benefits**

The purpose of an impact absorber is to absorb and distribute the forces arising in a crash and transfer them to the vehicle body. Metal structures, complex and expensive to process, are often used for this. Ultramid® Expand offers several advantages here: Using the polyamide particle foam reduces weight and improves energy absorption in the event of an impact. The production process is also more

cost-effective than for metal structures.

Ultramid® Expand is ideal for use in the automotive sector. Ultramid® Expand is a particle foam that withstands the body-in-white painting process, can be used as a reinforcing insert in later closed structures of the car body and can be installed in the body-in-white due to its high temperature resistance. The particle foam fulfils the demanding requirements of the automotive industry for the interior and for long-term use.

### **Ultramid® Expand: Optimum properties with simple and cost-effective processing**

Ultramid® Expand particle foam is based on a combination of several polyamide (PA) 6 types. It consists of pre-expanded particles with a defined particle size and density, which can be welded into a 3D component in a molding machine without producing foam waste. The particle foam can be easily processed on existing steam chest molding machines.

Another benefit is that the polyamide particle foam lends itself excellently to overmolding with materials of the same material. “This enables completely new types of hybrid components that can be recycled as single-material thermoplastic systems at the end of their life cycles,” René Holschuh, Segment Manager Transportation at BASF Performance Materials Europe, stresses. “Ultramid® Expand can therefore help to close the materials cycle – without compromising the mechanical properties of the components during their service life.”

### **About BASF**

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. Around 112,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio comprises six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €68.9 billion in 2023. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the United States. Further information at [www.basf.com](http://www.basf.com).

### **About BASF Performance Materials division**

BASF's Performance Materials division is at the forefront of the much-needed sustainability transformation in plastics. Our products are co-created with customers around the globe to bring innovations to major industry sectors such as transportation, consumer goods, industrial applications,

and construction. Our R&D focuses on all stages of the plastics journey: Make, Use and Recycle. The MAKE phase is about improving how plastics are made, from product design to the choice of raw materials and the manufacturing process itself. The USE phase enhances plastics' strengths such as light weight, robustness, and thermal resistance. At the end of the product lifecycle, the RECYCLE phase looks at how to close the loop to achieve a circular economy. In 2023, the Performance Materials division achieved global sales of €7.2 billion. Join #ourplasticsjourney at: [www.performance-materials.basf.com](http://www.performance-materials.basf.com).