

News Release

P354/19e
October 08, 2019

New size, new color, new processing method – Infinergy® picks up the pace

- **Mini beads allow thin-walled applications**
- **For technical applications: Infinergy® in black**
- **New processing method opens up further options**

Genuine material innovations are rare in the plastics industry. Infinergy®, the first expanded thermoplastic polyurethane (E-TPU) from BASF, therefore created a real stir when it was launched on the market in the adidas Boost running shoe. It introduces a completely new class of particle foams to the plastics market.

BASF customers from a wide range of different industries now use Infinergy® – from comfortable safety footwear and a dynamic tennis racket to a cushioning sports floor. At the K 2019 plastics fair, Infinergy® will be presented with a multitude of its applications and innovative approaches. It is no question that Infinergy® is also used in the Vision Venture, the futuristic camper van from Hymer.

Mini beads – when small is really big

The mini beads are less than half the size of normal Infinergy® beads: They have a diameter of between approx. 2.5 and 3.5 mm. These beads are deployed wherever the filling behavior of the standard product reaches its limits, for example for thin-walled parts.

As well as their reduced size, the round shape of the particles also helps to improve the filling behavior; enabling thin bars in the mold to be easily filled. Users do not have to compromise on the material properties, for example on the excellent rebound.

The mini beads are already used for vibration dampers in compressors and on bicycle saddles.

Ergon, which in 2017 became the first company to launch Infinergy® in a bicycle saddle – the Ergon ST Core Prime - now relies on the mini beads. An E-MTB saddle and a city saddle complete the range of bicycle saddles with an Infinergy® core. Andreas Krause, Head of Technical Development at Ergon, says: “The mini beads provide us with completely new options for product development and component design. The new product allows us to create much more slender component shapes which now also enable us to realize saddles in the sports market segment. In particular the saddle nose, which has thinner walls and sharper contours, can now be engineered with a slender, intricate design.”

Black – when it gets technical

Infinergy® – this was previously always synonymous with the color white. This is now changing with the first black Infinergy®. It is suitable in particular for technical applications where the surface is heavily susceptible to dirt. “We are opening up new possibilities for our customers with the black Infinergy,” says Thomas Stührenberg, BASF’s Head of Marketing for Europe. “There are fundamentally no limits on the range of colors – we want to work with our customers to make the Infinergy® range even more colorful in the future.”

Infinergy® explores new ground without steam

Conventionally the processing of particle foams, including Infinergy®, requires steam to weld the foams into a component. With high demands on the surface quality, this process soon reaches its limits, especially for components such as decorative applications. The reason: fewest of top-layers are vapor-permeable.

The start-up company FOX Velution, Lichtenfels, has developed a completely dry technology for processing particle foams to overcome exactly these limits and furthermore to significantly improve the energy-efficiency. Being variotherm, the technology makes applications for lightweight constructions with visible or tactile top layers, textile reinforcement and integrated inserts (electronics, assembly elements)

possible. This opens up completely new options for decoration and functionalization: LEDs incorporated into Infinergy® foam panels light up the material and top layers such as colorful films or structured fabrics create new visions.

Infinergy® live at K2019

Bicycle saddles, tennis rackets, sports and fall-protection floors, safety footwear, luminous Infinergy® panels and lots more – at the BASF stand in hall 5, stand C21/D21, visitors will be able to experience the variety of innovations from Infinergy® inspired. Completely new Infinergy® applications are found in Vision Venture, the concept camper van from Hymer and BASF. Here, Infinergy is the perfect fit – as a step, bed edge and as a comfort element in the slatted frame.

For more information: www.infinergy.basf.com

You can also receive the latest press releases from BASF via WhatsApp on your smartphone or tablet. Register for our news service at basf.de/whatsapp-news.

About BASF's Performance Materials division

BASF's Performance Materials division encompasses the entire materials' know-how of BASF regarding innovative, customized plastics under one roof. Globally active in four major industry sectors – transportation, construction, industrial applications and consumer goods – the division has a strong portfolio of products and services combined with a deep understanding of application-oriented system solutions. Key drivers of profitability and growth are our close collaboration with customers and a clear focus on solutions. Strong capabilities in R&D provide the basis to develop innovative products and applications. In 2018, the Performance Materials division achieved global sales of €7.65 bn. More information online: www.plastics.basf.com.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of around €63 billion in 2018. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at www.basf.com