

News Release

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Fakuma 2021 – BASF opens up endless possibilities with a variety of sustainable plastics solutions

- Together with customers and partners, BASF develops plastics for a circular economy
- BASF's innovations keep pace with trends and time and contribute to net zero emissions across industries

Plastics are an essential part of modern life. At the same time, they have become one of the most discussed topics. The public is debating more than ever about how plastics are used and why. Together with customers and partners, BASF has set itself the goal to contribute to a circular economy in which raw materials are conserved, plastic waste is reduced and materials can develop their full potential during use. This requires innovations - and BASF will be showcasing a large number of them from October 12-16 at the 27th Fakuma in Friedrichshafen, Germany (booth B4-4304).

High-performance material solutions for eMobility

Alternative drives, electromobility and CO₂ emission reductions are the defining topics in the automotive industry. Many solutions demonstrate the potential of BASF's versatile engineering plastics and polyurethanes. From high-voltage connectors and bus bar holders to electromagnetically shielded housings, a wide range of innovative eMobility applications will be shown. In addition, engine and transmission mounts are presented, that lead to savings in production, but also

contribute to optimized acoustic experiences - thanks to improved processing methods. A tunnel reinforcement, which is a joint project with Stellantis and L&L Products, recently won the Altair Enlighten Award for its weight savings.

For the first time, BASF presents a new flame-retardant Ultramid® grade (PA66) that expands the portfolio of color-stable, tailor-made engineering plastics for use in electric cars. The newly developed material combines color stability (available in orange RAL 2003) and mechanical strength in an innovative way and is thus able to meet the technical requirements the market demands.

Modern insulation as the key to effective climate protection

Insulation is an issue in the area of window profiles for new buildings and renovation. BASF has developed an Ultradur® grade (PBT/ Ultradur® B4040 G11 HMG HP green 75074) that can be co-extruded with PVC and is now available with a significantly improved property profile. With this new Ultradur®, PVC window profiles can be mechanically stiffened in the co-extrusion process. Compared to stiffening with steel, the profile is lighter, can be produced more cost-effectively without sacrificing stability and has an improved insulation value.

Sustainability - the key trend in the packaging industry

With the innovative portfolio of Ultradur® FC grades (PBT) for coffee capsules, BASF now offers customized, sustainable materials tailored to customer needs. Together with the basic material Ultradur® B1520FC R01, further product-specific features and services are offered, which can be used individually or combined by the customer as desired. For example, weight savings of up to 40 percent can be achieved and barrier properties (oxygen barrier) can be further optimized. In addition to the conventional PBT grades, ChemCycling and Biomass Balance types are also offered, which lead to significant CO₂ savings.

The PBT portfolio also includes Ultradur® B6560 M2 FC TF, the world's first PBT for the extrusion of films and thermoforming of food packaging. The mono-material exhibits excellent barrier properties, enables mechanical recycling and thus a closed material loop. Together with Illig, one of the largest manufacturers of thermoforming machines and a partner of BASF, the outstanding processability was confirmed in actual tests.

Ultrason® for household, automotive and E&E

Ultrason® (PAES) opens up a wide range of applications in the household, automotive and E&E industries. At Fakuma, BASF is exhibiting different water and baby bottles to demonstrate the processing and design possibilities Ultrason® offers for safe, stable and stylish bottles. For the automotive and E&E industries, new materials have been developed that show high tracking resistance (CTI), enabling innovative components for electric vehicles and E&E applications.

Ultramid® Advanced for fuel cells and consumer electronics

With Ultramid® Advanced N (PPA), BASF offers a high-performance alternative to aluminum die-cast components in fuel cell engines for buses and delivery vehicles. A thermostat housing and a manifold on the stand demonstrate the excellent thermal and chemical resistance of BASF's PPA, its outstanding mechanical properties, high impact strength as well as good dimensional stability and stable long-term performance. BASF is also presenting a new Ultramid® Advanced N grade: it is particularly suitable for connectors that are post-processed using surface mount technology (SMT). BASF supplies the new polyamide 9T in customer-specific colors with high stability. The new PPA increases the robustness, performance and reliability of power and data connectors in consumer electronics, e.g. computers, servers, smartphones as well as smart household and portable electronic devices.

Thermoplastic polyurethane based on renewable raw materials

With Elastollan® N (TPU), BASF is showcasing its bio-based thermoplastic polyurethane, which has the same outstanding performance profile as equivalent fossil-based Elastollan® grades. The grade with renewable raw materials also boasts good mechanical properties such as excellent tensile strength and elongation combined with high UV and aging resistance. The bio-based TPU can be used in all already known areas of Elastollan®, such as cable sheathing, films and conveyor belts but also in many injection-molding applications in the automotive and E&E industries.

Further information: <u>fakuma.basf.com</u> You're welcome to attend the <u>BASF@Fakuma LinkedIn Event</u>

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 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 2020, the Performance Materials division achieved global sales of €5.63 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. More than 110,000 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 is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €59 billion in 2020. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at <u>www.basf.com</u>.