News Release

BASF at Fakuma 2017: Experience the variety of plastics first-hand

- Engineering plastics are opening up new possibilities for car interior, chassis and powertrain
- IQ ONE flooring made from Elastollan® (TPU) defies wear and tear and remains flexible
- Successful balance: chair designs at the exhibition stand combine a delicate appearance with stability – thanks to Ultrasim®
- Spacers made from Ultramid® deliver perfect insulation for back-ventilated curtain facades
- Tinuvin® light stabilizers from BASF for durable plastics in car interior and artificial lawn
- Novel films made from Ultramid® remain soft, transparent and tear-resistant

From October 17 to 21, 2017, the Fakuma trade fair in Friedrichshafen will once again be opening its doors. This year visitors to stand 4306 in hall B4 can again look forward to seeing innovative plastic solutions from BASF for the construction and furniture industries as well as for the automotive and packaging sectors. In addition, there will be a reunion with the “superhero for engineers” Ultramid® Advanced N, BASF’s new polyphthalamide (PPA) for challenging applications in many industries.

Unique engineering plastics for the car interior, chassis and powertrain

For the automotive industry, BASF will be presenting engineering plastics for the car interior, the chassis and the powertrain. For the
first time, two unique special polyamides for the car interior will be shown to the public: They open up new design perspectives for high-gloss surfaces, back-lit structural and functional elements as well as designs which are pleasant to the touch. Both plastics are cost-efficient material solutions for visually and chemically demanding applications. The materials fulfill the strict requirements of the automotive industry regarding emissions and odor in car interiors.

BASF will also be displaying structural components that were developed together with leading automotive suppliers and optimized with the help of the simulation tool Ultrasim®: The engine mounts, transmission crossbeams and transmission adapters made from glass-fiber reinforced Ultramid® meet the growing customer requirements for crash and NVH (NVH = noise, vibration, harshness) behavior in the powertrain. They also demonstrate the excellent correlation between Ultrasim® simulation and component behavior and thus point to potential cost savings.

The stand will furthermore feature an overview of the expanded Ultramid® range for the charge-air duct in combustion engines of today and the future. The tailored range of PA6 and PA66 grades meets the increased requirements on the materials, their mechanical properties and temperature resistance. This means the part developer can choose the optimum material for the respective component in the charge-air duct that offers the best value for money. Selected grades are based on global specifications.

**Hard-wearing floor made from Elastollan®**

At the BASF stand a floor covering made from Elastollan® has also been laid. Elastollan® is the thermoplastic polyurethane (TPU) from BASF which is noted for its particularly good mechanical properties and very high resistance to abrasion. The floor therefore offers great flexibility and durability and is particularly suitable for areas of buildings with high footfall. The homogeneous floor covering is marketed by Tarkett under the name IQ One and is certified with Cradle to Cradle® gold and the “Blue Angel” eco-label. IQ One is 100 percent recyclable and produces only low emissions of VOC
(volatile organic compounds). Thanks to the versatility of the plastic, Elastollan® is also suitable for many other fields of application. A selection of extrusion and injection-molding exhibits will also be on display at the BASF stand.

**Variety of chairs made from Ultramid® SI**

Designers and developers from the furniture industry are increasingly choosing plastic as a material for their products. This is why visitors to the BASF stand can sit down on three different chair designs: on the Belleville from Vitra, the Metrik from Wilkhahn and the A-Chair from Brunner. All three are made from the polyamide Ultramid® SI (SI = Surface Improved) from BASF. In addition to the stability typical of polyamides, Ultramid® SI offers a persuasive choice with a particularly high-quality surface appearance. During the development of the chairs, the Ultrasim® simulation tool was used to exhaust the potential of the design and material in full. The result is a superb balance between a delicate appearance and strength.

**Ultramid® spacers for back-ventilated curtain facades**

Nowadays residential, commercial and industrial buildings are often insulated with back-ventilated curtain facades (BVCF). However, the expected insulating performance and energy saving can only be achieved if the supporting elements for hanging the facade allow as little heat as possible to pass between the wall and facade. To achieve this, the company BWM has developed the “Zela Click” facade holder made from BASF’s thermoplastic Ultramid®. This clever plastic holder reduces the energy loss and can be mounted quickly and easily. With the Fixrock fire barrier kit from BWM too, Ultramid® replaces the previously used metal and ensures the necessary back-ventilation between the facade insulation and cladding. With its expertise in engineering plastics, BASF supported the customer BWM in selecting the material and developing the product.

**Tinuvin® light stabilizers from BASF for durable plastics**

Whether they are used in car interiors, in artificial lawn or in carpets, polymers are frequently exposed to strong UV light, harsh weather
conditions and environmental pollutants. To ensure that the plastic retains its appearance and its original material properties over the long term, sterically hindered amines (HALS) are used as light stabilizers. For example, the HALS Tinuvin® 880 from BASF delivers unrivaled UV resistance for plastic parts in car interiors and improves their thermal stability at the same time. BASF has developed the HALS Tinuvin® XT 55 specifically for fibers and films that are present in industrial textiles or artificial lawn, for example. This high-performance light stabilizer also has a positive effect on processing problems and delays that can occur in the production of fibers and films.

**Films made from Ultramid®: soft, transparent and tear-resistant**

The special properties of two new Ultramid® copolyamides are opening up a wide variety of possible applications for BASF’s customers. The partially bio based Ultramid® Flex F38L is soft, transparent and tear-resistant even at low temperatures and low humidity. This makes it particularly suitable for industrial films or soft packaging, as is used for food, for example. Softness, transparency and tear-resistance are also the strengths of Ultramid® C37LC. It is used both for shrink film in the food sector and for fishing nets and fishing lines. In addition, with this Ultramid® customers benefit from a more efficient production process because they no longer need to add amorphous polyamides for processing.

**New production complex for Ultraform® in Korea**

A 50:50 joint venture involving BASF and Kolon Plastics called “Kolon BASF innoPOM, Inc.” is building a new, highly efficient production plant for polyoxymethylene (POM) in Korea. The plant with an annual capacity of 70,000 metric tons will be based at Kolon Plastics’ existing production site in Gimcheon. This will be the world’s largest production complex for POM. It is scheduled to start operating in the 3rd quarter of 2018. BASF offers POM products under the trade name Ultraform®. But BASF customers can already scrutinize the first samples of the new products labeled with the suffix “AT”. The samples were produced at Kolon’s existing plant and are identical to those that
the new plant under the joint venture will produce. The first commercial quantities are also already available.

On the internet:
www.plasticsportal.eu
www.polyurethanes.basf.de

E-Mail contact:
ultraplaste.infopoint@basf.com

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 2016, the Performance Materials division achieved global sales of € 6.9 bn.

More information online: www.performance-materials.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 114,000 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 five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas. BASF generated sales of about €58 billion in 2016. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com.