BASF develops Ultramid® particle foam for a wide range of applications

- Broad scope of applications due to unique profile of characteristics
- Material withstands temperatures up to 230°C

For the first time, BASF introduces a particle foam based on a combination of several polyamide 6 grades. The particle foam excels with a wide range of unique characteristics: high temperature-resistance, outstanding stiffness and strength as well as an excellent chemical resistance, e.g. in contact with fuels, oils and lubricants. Additionally, the closed cell foam structure offers an exceptional compressive strength, a requirement for the use in crash relevant components that are exposed to high mechanical demands. Molded part densities can be adjusted across a wide range of 150 to 600 g/L. Because of this versatility, lightweight applications are possible as well.

“BASF continues its long tradition of developing particle foams. We started this project in close co-operation with our customer and now we are able to successfully produce various prototypes”, said Daniela Longo-Schedel, research engineer at BASF. “Thanks to the temperature stability and adjustable mechanical characteristics, the particle foam is suitable for a wide range of applications. Furthermore, it can be effortlessly processed on conventional EPP-molding machines as well as with innovative water steam free technologies. We are working
closely together with our customers to finalize the product development.”

BASF’s Ultramid® grades are molding compounds on the basis of PA6, PA66 and various co-polyamides such as PA66/6. The range also includes PA6/10 and semi-aromatic polyamides. The molding compounds are available unreinforced, reinforced with glass fibers or minerals and also reinforced with long-glass fibers for special applications. Ultramid® is noted for its high mechanical strength, stiffness and thermal stability. In addition, Ultramid® offers good toughness at low temperatures, favorable sliding friction behavior and can be processed without any problems.

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About BASF

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