

Polyurethanes: an innovative application for car interiors

The number of cars is increasing from year to year. People everywhere expect beautifully designed, comfortable and safe cars. At the same time, the limited availability of fossil fuels and climate change call for more efficient cars and lower emissions. To meet these requirements, the automotive industry needs to continue to innovate. Modern vehicles are already heavily based on chemical products and solutions.

Polyurethanes are an important constituent in almost all cars worldwide. The foam is used in many different applications including dashboards, chassis components (Cellasto®), cable sheathing, headrests, steering wheels, gear knobs, seats, bumpers and door trims, along with many others. PU systems are often injected into a cavity as a reactive liquid mixture, where they foam or cure directly into the required shape. Due to its thermoformability and very low density, the open-cell foam Elastoflex® E is ideal for making car headliners.

In the interior of a car, the headliner forms the largest surface for reducing noise, and thereby increases driving comfort. They do not just absorb noise, but special manufacturing processes also reduce emissions in both production and use. The new adhesive from the Elasthan® PU system has been developed for the efficient bonding of sandwich structures made of glass fiber matting, thermoformable PU foam and textiles. The comprehensive expertise of the BASF experts made it possible to develop an adhesive that not only has very low aldehyde emissions, but

also demonstrably reduces them in the headliner module. For example, the use of Elastan 6578 reduced the formaldehyde and acetaldehyde emissions of a part by up to 50%.

This new adhesive application is yet another addition to BASF's global portfolio of innovative solutions for reducing emissions in car interiors. Major trends in the automotive industry, such as autonomous driving and electromobility, also demand efficient, high-performance components. Thanks to the versatility of polyurethanes, BASF provides ideal solutions with a comprehensive range of products, contributing to new developments in the automotive industry.



Further information:

www.polyurethanes.basf.com