

Press Release



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Covestro material solutions provide aesthetics, comfort and functionality

Design variety in the car interior of the future

New drive systems, increased connectivity and the trend towards ridesharing are all contributing to the fact that the car of the future will become a mobile, multifunctional living and working space. This also has a strong impact on the design of the interior. Here, the spotlight is placed on functionality, comfort and design along with efficiency and light weight. To meet these requirements, [Covestro](#) and its partners have developed a [premium concept](#) with [material solutions](#) for the interior and presented it for the first time at the K 2019 plastics fair.

“In particular, a high-quality and individual design has considerable influence on consumers' buying decisions while providing car manufacturers opportunities for brand differentiation,” explained Jochen Hardt, Global Marketing Mobility in the Polycarbonates segment at Covestro, in a live webcast to journalists. “Here, the focus is on the design of surfaces using colors, optics and haptics, with light effects and functions. Products from Covestro open up almost unlimited possibilities.”

Jack of all trades polycarbonate

Plastics such as the polycarbonate Makrolon® and the polycarbonate blends Bayblend® and Makroblend® are lightweight and robust and ensure good thermal and electrical insulation. They can be used to implement a wide range of design solutions, with glass-like surfaces, many colors and options for integrating displays, sensors and cameras.

Wafer-thin layers of natural materials such as wood and marble will play a vital role in the car interior of the future. On the surface of injection-molded components made of the polycarbonate Makrolon® Ai (derived from "Automotive interior"), they are ideal for creating a feel-good ambience.



Good mood with lighting effects

With lighting, the effects can be enhanced even further. One example is the floor in the prototype car interior concept: Here, light from a polycarbonate part shines through a wafer-thin layer of marble. This effect could also be created by coating it with a digitally printed film.

But the high transparency of polycarbonate itself can also be used to create lighting effects, for example by illuminating the background or edges. The light can be dynamic and communicative, but also atmospheric, relaxing and cozy. Covestro anticipates growing demand for increasingly personalized lighting experiences and functions.

Polycarbonate also forms the basis for continuous fiber-reinforced thermoplastic composites called Maezio[®]. The unidirectional arrangement of the fibers lends the surface a special aesthetic effect. In addition, the seat shells made from it and a new space-saving table are very light and exceptionally robust.

More sustainable coatings

The use of paints and coatings in car interiors is also multifaceted. Many colors as well as optical and haptic effects are possible here. Covestro was a pioneer in the development of water-based coatings with a very low content of volatile organic compounds (VOC). In the interior concept, the waterborne floor topcoat is based on the polyurethane (PU) raw materials Bayhydro[®] and Bayhydur[®], which give it durability and individuality. The aqueous INSQIN[®] PU technology for textile coating is used in the headrests, instrument panel and seats.

Covestro is also a pioneer in the use of predominantly organic-based PU raw materials such as the coating hardeners Desmodur[®] eco N 7300 and Bayhydur[®] eco 701-90 and the urethane acrylate dispersion Bayhydro[®] eco 2877.

Advantage of polyurethane

The floor of the interior has been completely redesigned with PU materials to create a pleasant and homelike setting. Baypreg[®] is a two-component polyurethane system that is lighter than steel, providing significant advantages. The combination of Baypreg[®] and glass fiber mats with core materials such as paper honeycomb or foamed polycarbonate enables a significant reduction in weight while providing high mechanical strength.

The Baynat[®] PU system provides effective sound absorption. It makes self-supporting components possible and has long been used in vehicle headliners, but it is likely to play a particularly important role in the quiet electric car of the future when it comes to absorbing the noise of other passengers and the world



outside. The soft Bayfit® polyurethane system is recommended for even greater damping of noise and vehicle vibrations. It is usually foamed in cavities for this purpose.

Our Presskit

Find more information on the topic in our [press kit!](#)

About Covestro:

With sales of EUR 12.4 billion in 2019, Covestro is among the world's largest polymer companies. Business activities are focused on the manufacture of high-tech polymer materials and the development of innovative solutions for products used in many areas of daily life. The main industries served are the automotive, construction, wood processing and furniture, and electrical and electronics industries. Other sectors include sports and leisure, cosmetics, healthcare and the chemical industry itself. Covestro has 30 production sites worldwide and employs approximately 17,200 people (calculated as full-time equivalents) as of the end of 2019.

Forward-looking statements

This press release may contain forward-looking statements based on current assumptions and forecasts made by Covestro AG. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Covestro's public reports. These reports are available at www.covestro.com. The company assumes no liability whatsoever to update these forward-looking statements or to make them conform to future events or developments.