

Press Release



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Covestro expands healthcare portfolio

New polycarbonates meet demands for drug delivery and surgical devices

With more than 50 years of experience in the healthcare industry, Covestro continues to expand its materials offering to help manufacturers meet requirements for life-enhancing applications. The company is introducing two medical-grade polycarbonate families for drug delivery and surgical devices that patients and medical professionals can rely on.

Attendees at [Pharmapack](#), February 5-6, in Paris, can visit the Covestro booth (K46) to learn more about the company's polycarbonate materials for the healthcare industry. Covestro will also highlight its materials at booth #2221 during [MD&M West](#) Conference and Exposition, February 11-13, in Anaheim, California.

Smooth delivery with low-friction polycarbonate

More and more, patients are using autoinjectors and injection pens to self-administer therapeutics from the comfort of their own home or on the go. These devices are expected to operate consistently every time, and utilize low-friction components to ensure injections are reliable and smooth.

To meet challenging low-friction requirements, Covestro is launching three new medical-grade [polycarbonates](#): Makrolon[®] M204 LF, Makrolon[®] M402 LF and Makrolon[®] M404 LF. Featuring reduced coefficients of friction, these grades deliver the excellent dimensional and mechanical properties of polycarbonate while eliminating the need for external lubricants.



The new low-friction Makrolon[®] polycarbonates offer the following benefits to drug delivery devices:

- Lower deployment forces
- Durability and biocompatibility according to ISO 10993-1
- Sterilizable with various methods, including autoclave, ethylene oxide and radiation (e-Beam, gamma)

“We built on the superior performance of polycarbonate to formulate low-friction grades that offer consistency and versatility which, in turn, help OEMs design devices that address emerging drug delivery trends,” said Doug Hamilton, global healthcare marketing leader, Covestro LLC.

Superior strength with glass-filled polycarbonate

Covestro also developed new [glass-filled polycarbonates](#) for surgical and drug delivery applications that demand stiffness and strength, such as load-bearing internal components for drug delivery devices and handles for minimally invasive or laparoscopic surgical tools.

These grades are divided into two series with varying levels of reinforcement. The high-performance series includes Makrolon[®] M810 GF, Makrolon[®] M820 GF and Makrolon[®] M830 GF polycarbonate. In the high-flow series, Makrolon[®] M410 GF, Makrolon[®] M420 GF and Makrolon[®] M430 GF polycarbonate are used for filling larger or thinner parts with improved productivity.

Additional advantages of Makrolon[®] GF polycarbonates include:

- Biocompatibility according to ISO 10993-1 for applications less than 30 days
- Superior rigidity and strength
- High-gloss surface achievable with rapid heat cycle molding
- Higher tensile modulus and tensile strength, and improved dimensional stability under stress when compared to unfilled polycarbonate

“Our expanded materials offering gives healthcare OEMs access to a wide range of glass-filled polycarbonate products that deliver performance tailored to fit their applications,” said Hamilton.

About Covestro:

With 2018 sales of EUR 14.6 billion, 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 segments served are the automotive,



construction, wood processing and furniture, and electrical and electronics industries. Other sectors include sports and leisure, cosmetics, health and the chemical industry itself. Covestro has 30 production sites worldwide and employs approximately 16,800 people (calculated as full-time equivalents) at the end of 2018.

This press release is available for download from the Covestro press server at www.covestro.com. Photos are available there for download as well. Please acknowledge the source of any pictures used.

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Forward-looking statements

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