Press Release

Leverkusen/Shanghai,
April 19, 2023

Covestro AG
Communications
51365 Leverkusen
Germany

Contact
Richard Fu
Telephone
+86 21 8020 8452
EMail
Richard.Fu
@covestro.com

Contact
Dr. Frank Rothbarth
Telephone
+49 175 30 25363
EMail
Frank.Rothbarth
@covestro.com

Advanced solutions for the circular economy

Covestro expands its range of more sustainable polycarbonates

- **Introduction of a grade with 90 percent recycled content**
- **Climate neutral[1] polycarbonates with up to 89 percent sustainable share**
- **Collaboration with Jabra on Evolve2 headset**

More sustainable plastics, especially those with increasing proportions of recycled material or biomass and consequently a lower carbon footprint, are increasingly in demand. At the same time, the industry is developing new solutions to achieve circular economy and climate neutrality. Covestro now offers a polycarbonate with a 90 percent recycled content of plastic from post-consumer waste (PCR) that can be used in consumer electronics, among other applications. The carbon footprint of the new Makrolon® PCR polycarbonate resin is 70 percent[2] lower than that of a comparable fossil-based virgin plastic and is part of the CQ portfolio of circular solutions at Covestro. The company plans to initially offer this grade in the Asia-Pacific region.

"We are very proud of this breakthrough solution as it will enable our customers to achieve their sustainability goals faster. This is especially true for industries such as consumer electronics and audio and networking equipment manufacturers, which have ambitious sustainability goals of their own," said Lily Wang, Global Head of the Engineering Plastics segment at Covestro. "This is another step toward our vision of becoming fully circular, and an important contribution to accelerating the transformation of industries toward a recyclable and carbon-neutral future."

This type of plastic can achieve exceptional whiteness and highly saturated colors, which is typically a challenge for PCR plastics with high recycled content. This is

---

[1] Climate neutral according to a verified life cycle assessment based on ISO standards 14040/14044. Climate neutrality is demonstrated by assessing a partial product life cycle from resource extraction (cradle) to factory gate, also known as cradle-to-gate assessment. The calculation takes into account biogenic carbon sequestration rather than first "life" pollution. It is based on preliminary data from the supply chain and replaces the electricity grid mix with renewable electricity used in the Covestro manufacturing process. No compensation measures were applied. The LCA methodology developed by Covestro AG is scientifically sound and corresponds to the state of the art. ID no. 0000083440: Covestro AG - Certipedia

[2] According to an internal calculation by Covestro based on the TÜV reviewed EcoPAss LCA method (ID No. 0000083440: Covestro AG – Certipedia)

made possible by selecting high-quality recyclates and optimizing the material composition during the compounding process. The PCR grade is manufactured with halogen-free flame retardants that meet performance requirements without increasing environmental impact. It also meets the highest V-0 rating of Underwriters Laboratories' UL 94 flammability standards.

Partnership with Jabra

Covestro's Bayblend® FR3010 R75 polycarbonate blend is used, for example, in the ear cups of Danish brand Jabra's latest Evolve2 headset series for audio equipment and video conferencing systems. This type is made of 75 percent recycled material and has a 50 percent lower carbon footprint[2] compared to its conventional fossil-based counterpart, but still meets performance requirements well.

To meet rising demand, Covestro is currently building a dedicated compounding plant for PCR polycarbonates at its integrated site in Shanghai. Once commissioned, which is scheduled for later this year, it will be able to supply more than 25,000 metric tons of high-quality PCR polycarbonates annually.

Climate-neutral[1] solutions through mass balancing

In addition to PCR grades produced through mechanical recycling, Covestro is also making progress with polycarbonates attributed with raw materials produced using a mass balance approach derived from bio waste and residual materials and certified to the internationally recognized ISCC PLUS standard.

The company now regularly supplies Makrolon® RE polycarbonates with a renewable attributed raw material content of up to 89 percent[3]. Selected products, including climate-neutral[1] polycarbonates, are supplied with 100 percent renewable electricity under a TÜV-certified system[4]. Already at the end of 2021, Covestro supplied customers in Europe with the world's first climate-neutral[1] polycarbonates. Also the RE series is part of the CQ portfolio of circular solutions at Covestro.

The mass-balanced products demonstrate an identical good quality and performance as fossil-based polycarbonates and offer an out-of-the-box solution for customers with a significantly lower carbon footprint.

---

[3] According to the newly published ISCC PLUS system document V3.4, oxygen atoms from ambient air that react with ISCC-certified raw materials are counted towards the sustainable fraction. ISCC PLUS (www.iscc-system.org)

[4] Certified management system: ID no. 0000084999: Covestro AG – Certipedia

About Covestro:
Covestro is one of the world's leading manufacturers of high-quality polymer materials and their components. With its innovative products, processes and methods, the company helps enhance sustainability and the quality of life in many areas. Covestro supplies customers around the world in key industries such as mobility, building and living, as well as the electrical and electronics sector. In addition, polymers from Covestro are also used in sectors such as sports and leisure, cosmetics and health, as well as in the chemical industry itself.

The company is committed to becoming fully circular and is striving to become climate neutral by 2035 (scope 1 and 2). Covestro generated sales of EUR 18 billion in fiscal 2022. At the end of 2022, the company had 50 production sites worldwide and employed approximately 18,000 people (calculated as full-time equivalents).

Find more information at the Covestro Homepage.
Read our Corporate Blog.
Follow us on the Covestro Social Media Channels: