



## Press Release

Leverkusen/Shanghai,  
September 30, 2019

Polymaker launches three new polycarbonate-based products

Covestro AG  
Communications  
51365 Leverkusen  
Germany

Contact  
Dr. Frank Rothbarth  
Telephone  
+49 214 6009-2536  
Email  
frank.rothbarth  
@covestro.com

Polymaker  
Marketing &  
Communications

Contact  
Luke Taylor  
Telephone  
+86 1550 2176175  
Email  
marketing  
@polymaker.com

### Versatile materials for 3D printing

#### Collaboration with Covestro

[Polymaker](#), a market leader in advanced 3D printing products, announced the launch of three new polycarbonate-based 3D printing materials each with unique properties commonly used in various industries. Polymaker has partnered with [Covestro](#) to bring these new materials to market, thus enabling the access to materials well known to industry professionals and optimised for 3D printing.

The three new materials consist of:

- *Polymaker™ PC-ABS* – a blend of already commonly used 3D printing materials, polycarbonate and ABS. The advantages of this blend are high impact and heat resistant and easy processing. The polycarbonate boosts the heat resistance and toughness of the material while the ABS contributes to the good processing properties. This PC-ABS is also specialized for surface finishings, i.e. by electroplating and metallization, providing a good approach for post processing.

*Polymaker™ PC-ABS* uses Covestro's Bayblend® family as its base material which is a commonly used plastic in the automotive and information technology industry today. *Polymaker™ PC-PBT* – this polymer blend combines the good chemical resistance of PBT with the strength and toughness of polycarbonate. *Polymaker™ PC-PBT* performs very well under extreme circumstances whether in contact with hydrocarbon based chemicals or operating at subzero temperatures. The product maintains good toughness and its natural ductile fracture behavior at low temperatures.



- Polymaker™ PC-PBT is created from Covestro's Makroblend® family which is widely used in various industries. Compared to PC resins and PC-ABS compounds, PC-PBT has better resistance to chemicals, which enables printed applications where resistance to intermittent contact with fuels, oils, lubricants, cleaners is necessary.
- *PolyMax™ PC-FR*, a creation from Covestro's Makrolon® family, where the FR stands for flame retardant – the main feature of this polycarbonate based compound. This base material achieves V0 performance in the UL94 flame retardancy test and benefits applications where respective material approval is required. This allows PolyMax™ PC-FR to be applied for battery housings, motor mounts in aerospace and other industries. Within the automotive and electrical and electronics industry, many professionals are well accustomed with such FR materials.

Polymaker have introduced their nano reinforcement technology that is featured in all PolyMax™ materials. This boosts the fracture toughness of the FR material and produces a flame-retardant filament that can still perform in demanding applications. PolyMax™ PC-FR uses Covestro's Makrolon® showing a good balance between mechanical performance and safety, which has already been applied in electronic motorbikes, aerospace spare parts, and automotive production.

#### **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.

#### **About Polymaker:**

Polymaker is a company that produces advanced 3D printing materials specifically engineered for a wide range of applications across many industries. At the heart of Polymaker is a large research and development laboratory which drives the company forward through constant innovation and testing. All Polymaker materials are formulated and optimized for 3D printing while maintaining the unique properties inherent to the respective base polymer.



*This press release is available for download from the Covestro press server at [www.covestro.com](http://www.covestro.com).*

Find more information at [www.covestro.com](http://www.covestro.com).

Follow us on Twitter: <https://twitter.com/covestro>

ro (2019-131E)

**Forward-looking statements**

This news 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 which are available at [www.covestro.com](http://www.covestro.com). The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.