



Repsol expands its range of advanced materials for 3D printing

- Repsol launches **two new products for additive manufacturing** specially designed **for applications with high mechanical performance**.
- These two new advanced materials, based on special Repsol polypropylene grades, are **reinforced with mineral fillers and fiberglass**, respectively, to improve their mechanical properties.

Repsol's PP 3D range is suitable for FFF and FGF technologies

Repsol expands its range of 3D printing products with two new advanced polypropylene (PP) materials, designed for technical applications where high mechanical performance is required. These materials, reinforced with mineral fillers and fiberglass, are especially suitable for printing small and large-format pieces.

- **Repsol Isplen P3D820FM** is a reinforced polypropylene **with a high percentage of mineral filler and medium fluidity** that offers high rigidity and very high dimensional stability and warping control maintaining a good level of impact and an optimal surface appearance. It contains UV stabilization and excellent scratch resistance, making it ideal for outdoor use in **applications such as prototyping, tools, toys, footwear, automotive components, jewelry, and entertainment**.
- **Repsol Isplen P3D630FV** is a **glass fiber** reinforced polypropylene particularly indicated for applications that require excellent impact resistance, high rigidity, and low deformation and contraction behavior. This product is stabilized to UV rays, so it is indicated for **outdoor applications such as technical parts, functional prototypes or guides, and accessories for the automotive sector**, among others.

In 2020 Repsol launched its range for 3D printing with three grades of polypropylene custom-designed for additive manufacturing. The materials were developed by modifying some polymers' characteristics to offer improvements in polypropylene printing processes while achieving excellent mechanical properties, processability, and stability.





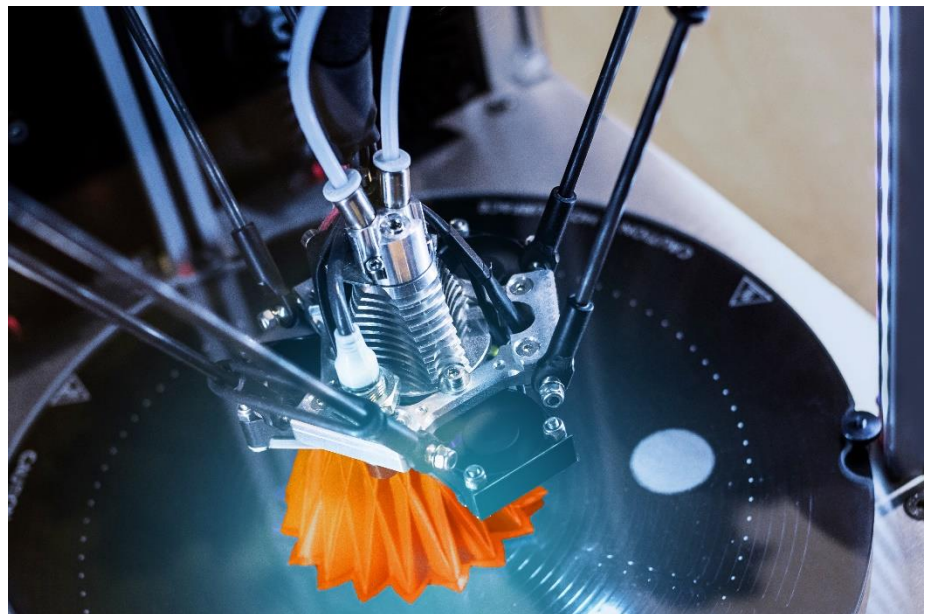
These advanced materials are obtained by custom designing polymers for additive manufacturing to meet the highest technical requirements

With the addition of these two new materials to the range, Repsol is committed to the technification and specialization of its products that allow it to respond to the highest requirements in sectors such as automotive, aerospace, toys, leisure, and healthcare, among others. All of them can be used in the manufacture of filament for the technology of FFF (fused filament fabrication), also known as FDM (fused deposition modeling), or directly for use in pellet format for equipment that uses the technology of FGF (fused granulated fabrication).

Repsol's 3D printing materials are ideal both for the manufacture of prototypes and functional parts. In this way, the multienergy company promotes 3D printing technologies that advance in the circularity concept since they allow to optimize the consumption of material from the design stage and minimize the waste of materials in the printing stage. Also, like the rest of Repsol's polyolefins, these products are 100% recyclable.

Polypropylene is an ideal material for 3D printing as this material offers high mechanical performance and low density that allows for greater weight reduction in final pieces compared to other materials. Furthermore, polypropylene's exceptional chemical resistance makes this material ideal for parts in contact with a wide variety of chemicals and solvents.

Supplementary graphic material and photographs to illustrate the information in the press release:



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