

17.08.2022

Grupa Azoty adds recycled filaments to its 3D printing materials range

The new Tarfuse® rPLA line comprises filaments made from granules that are 100% industrial recyclate derived from residual waste recycling. The new line is Grupa Azoty's response to eco-friendly expectations of 3D printing users.

Grupa Azoty launched commercial sales of its Tarfuse® products for FDM applications in March 2020. The basic raw material for the manufacture of the filaments line launched in 2020 is the high-quality Polyamide 6 and its modified varieties produced at Grupa Azoty S.A. Importantly, the performance and mechanical properties of the new line of recycled filaments do not differ from the core Tarfuse® line.

Products for 3D printing applications are developed at the Grupa Azoty 3D Printing Materials Centre at the Research and Development Centre in Tarnów.

'At Grupa Azoty, we consistently modify our product portfolio in line with the concept of sustainability. We are constantly looking for solutions enabling us to market products that respond to the challenges of circular economy. The new line of filaments made from granules that are 100% industrial recyclate is a perfect example of how we integrate circularity into our technologies,' said Tomasz Hinc, President of the Management Board of Grupa Azoty S.A.

Tarfuseâ rPLA has very high mechanical strength, flexibility, excellent interlayer adhesion, and low linear shrinkage. Polylactide (PLA) is an aliphatic polyester obtained from renewable raw materials. PLA is fully biodegradable, meaning that it breaks down in the natural environment in the presence of microorganisms. What remains after the biodegradation process is complete are natural and harmless substances, such as water, CO_2 and organic matter. In addition to composting, PLA can also be recycled via mechanical and chemical recycling processes.

The new recycled product line is another modification to the original Tarfuse® line. We can see a growing number of customers pay attention to manufacturing methods and the environmental impact of products as well as product quality. With our technologies and experience, we are capable of fully meeting these requirements, 'said Grzegorz Kądzielawski, Vice President of the Management Board of Grupa Azoty S.A.

Recently, Grupa Azoty has added the Tarfuse® envi line of eco-friendly filaments designed for fast biodegradation to its portfolio of 3D printing products. Developed with the environment in mind, the Tarfuse® envi 1 formula releases less CO_2 into the atmosphere during decomposition.