

## **KIMYA extends its range of high-performance 3D filaments with Kimya PC-FR (flame retardant)**

In November 2022, KIMYA, an ARMOR GROUP company, launches a new high performance 3D filament, intended for use in the transport industry: the Kimya PC-FR, a fire and smoke certified polycarbonate with fire resistant properties. Keen to respond to the certification standards of its clients in the industrial sector, KIMYA continues to expand its range of ready-to-use high-performance 3D filaments.

### **A fire and smoke certified polycarbonate**

Expert in the formulation and characterization of materials dedicated to additive manufacturing, KIMYA continues to enrich its range of high-performance 3D filaments with Kimya PC-FR: a ready-to-use fire-smoke polycarbonate plastic that can withstand temperatures up to 105°C. Certified to EN45545-2 level HL1/HL2/HL3/R1 and R6, Kimya PC FR filament is particularly interesting for applications in sectors concerned with fire safety such as mass transportation (rail, aviation and naval).

*“Due to its specific technical characteristics, Kimya PC-FR is an ideal material for printing mechanisms and railway parts that are subject to high heat, such as runners to increase the wheel-rail adhesion of a train during emergency braking”,* states Nicolas Morand, R&D, Innovation and Industrialization Manager at KIMYA.

### **Kimya Materials: expertise in high performance materials**

In total there are more than 25 filaments that KIMYA - with the help of its resellers - distributes in about twenty countries, including 10 technical filaments and 8 high performance filaments. With higher resistance levels and benefiting from physical-chemical properties, (such as resistance to high temperatures and warping), these engineering materials are notably suitable for applications in the railway, automotive and aviation industries.

*“In order to address our industrial clients needs as closely as possible, we continue to enrich our range of high-performance filaments created in our own R&D department. Thanks to our expertise in chemical formulation, we can create bespoke materials very quickly and ready to use products for any type of application, including food contact and Outdoor environments, including industrial sector applications subject to solvents or high temperatures”* adds Benoît Stoeux, Managing director at KIMYA.

### **Partner of 3D printer manufacturers**

In order to facilitate the printing process for all users, KIMYA has established numerous partnerships with 3D printer manufacturers. The objective: to obtain approval for Kimya filaments to be used on their machines, for industrial customers and professional office services. For example, the Kimya PC-FR filament has been approved on the Ultra model from Finnish manufacturer miniFactory, a KIMYA partner since 2018.

*“Our expertise in the formulation and production of high-performance filaments is recognized by the leading manufacturers of 3D printers. In 2022, two of our materials were approved by Stratasys allowing users to benefit from an extended filament range, gain flexibility and accelerate the adoption of additive manufacturing to their production process. In parallel, we are also capable of developing bespoke materials for our manufacturing partners”* concludes Benoît Stoeux.

## About KIMYA

A pioneer in additive manufacturing, **KIMYA**, an ARMOR GROUP company, designs and produces materials for 3D printing for local production. KIMYA offers a range of ready-to-use filaments (Kimya Materials) and develops high value-added bespoke 3D printing materials (Kimya Lab). Since 2017, KIMYA has been building strategic partnerships with leading 3D printer manufacturers (Stratasys, Raise 3D, miniFactory, Ultimaker and AON3D) seeking to approve Kimya filaments on their machines to facilitate the printing process for their users. With several dozen employees, KIMYA has a production site of over 2.000m<sup>2</sup> in France.



Photo credits: KIMYA