

Colombes, 15th November 2022

ARKEMA SHOWCASES AT FORMNEXT AND UNVEILS NEW HIGH PERFORMANCE AND MORE SUSTAINABLE SOLUTIONS

Arkema, a leader in specialty materials & a pioneer in high-performance materials for 3D printing, continues its development in additive manufacturing and provides innovative and more sustainable new material solutions for all major 3D printing technologies.

ARKEMA'S NEW PRODUCTS

Liquid resins for UV curing

Arkema offers an integrated line of performance liquid materials for UV-curable 3D printing, through N3xtDimension® custom formulations for customer-specific product development, N3xtDimension® engineered resins for targeted advanced performance, and Sartomer® specialty resins and additives to fine-tune end formulations.

At the exhibition, Arkema will introduce two new high-performance custom formulations to extend its leading range for UV-curing:

- N3D-HITEMP062: hybrid **high temperature material with excellent toughness and high HDT properties.**
- N3D-CAST063: **very high-resolution material, enabling matte finish** so that details can be easily seen and a melting behavior during burnout **for high quality castings.**

Within their engineered resins portfolio, Arkema will also introduce **a new elastomeric material with an outstanding balance between elongation at break** of 170% **and tear strength** of 33 kN/m, leading to excellent mechanical properties for functional parts.

Powder bed fusion

At the exhibition, Arkema will display new solutions for powder bed fusion technologies, led by flagship brands such as Rilsan® bio-based polyamide and Kepstan® PEKK high performance thermoplastic.

- Resulting from continuing collaboration on responsible manufacturing, Arkema and EOS are pleased to announce the future release of a **new carbon neutral PA1101.**
- Arkema and EOS will launch together a **new Kepstan® PEKK powder for the EOS P 810 system,** delivering higher ductility, excellent electrical insulation and higher recyclability, to fulfill the needs of high temperature applications in Oil & Gas and Electrical & Electronic markets.

Filament

With a dedicated range of advanced polymers for filament extrusion printing technologies, Arkema is pleased to announce the release of **Kimya Kepstan® PEKK-SC 3D filament** on Stratasys Validated Material Ecosystem, developed with our partners Stratasys and Kimya. This high performance thermoplastic filament goes beyond expectations to perform in the harshest industry environments such as end-use Oil & Gas applications like back-up rings.

ARKEMA'S NEW PARTNERSHIPS AND CO-INNOVATIONS

Arkema continues to collaborate with industry thought leaders to co-design the next generation of 3D printed materials and solutions:

- Launch of two original, **fully formulated materials, co-developed by Arkema and Continuous Composites**, based on N3xtDimension® solutions and for exclusive use with Continuous Composites CF3D Enterprise™ system. **PolyMat™ High Tg product is for printing of continuous carbon and glass fibers to produce lightweight, high temperature performance structures. CeraMat™ Carbon/Carbon resin is for the creation of Carbon Bonded Carbon precursor parts for ultra-high temperature applications**
- Featuring new, lower-waste parts from its collaboration with **Desktop Metal, Inc.** (following their acquisition of EnvisionTec and Adaptive 3D) including a **Free Foam™ footwear midsole, Elastic ToughRubber™ for vibration dampening coupling and Desktop Health Flexcera™ materials for dental**, all developed in partnership with Arkema and incorporating N3xtDimension® solutions
- Arkema's **partnership with BCN3D to develop innovative resins specific to their groundbreaking VLMTM 3D™ printing system for use in the transportation, consumer, industrial and sporting goods markets**
- **HP, leading provider of industrial 3D printing solutions worldwide, now offers interested customers the Virtucycle® program**, the Arkema recycling solution of 3D used powders and printed parts. Launched in 2019, the Virtucycle® program offers three axis of support to Arkema's high performance polymers customers and downstream users: Eco-design expertise, recyclability and recycling guarantee as well as recycled high-performance polymers (Contact virtucycle3D@arkema.com for more details).
- On-demand manufacturing software provider **3YOURMIND and Arkema have announced 'Easy 3D'** – an online digital platform connecting Arkema customers to suppliers offering Arkema materials. By adopting this platform, engineers gain access to Arkema's powerful material recommendations, which helps support decision-making and part application development for on-demand manufacturing. In addition, the new platform leverages 3YOURMIND's digital expertise by creating a complete network that enables users to order parts utilizing the best materials, technologies, and additive manufacturing (AM) suppliers. (Visit 3YOURMIND at booth Hall 11.1 Booth #D58 for more details).
- **Arkema joined the trusted material partner network of Replique.** The Additive manufacturing company Replique is empowering manufacturers to shift from a physical to a digital inventory and providing worldwide spare parts on-demand. Arkema is proud to support such great initiatives with the right high-performance solutions, such as Kepstan® PEKK, or bio-based Rilsan® PA11 for industrial durable applications, and many other markets. (Visit Replique at booth Hall 12.1 Booth #B73 for more details).

ARKEMA'S TEAM OF EXPERTS WILL MEET YOU HALL 12.1 -BOOTH #C129

Building on its unique set of expertise in materials science, Arkema offers a portfolio of first-class technologies to address ever-growing demand for new and sustainable materials. With the ambition to become in 2024 a pure player in Specialty Materials, the Group is structured into 3 complementary, resilient and highly innovative segments dedicated to Specialty Materials - Adhesive Solutions, Advanced Materials, and Coating Solutions - accounting for some 85.5% of Group sales in 2021, and a well-positioned and competitive Intermediates segment. Arkema offers cutting-edge technological solutions to meet the challenges of, among other things, new energies, access to water, recycling, urbanization and mobility, and fosters a permanent dialogue with all its stakeholders. The Group reported sales of around €9.5 billion in 2021, and operates in some 55 countries with 20,200 employees worldwide.