



Press Release

February 9, 2021

Three new functional polymers for durable prototype, production tools and functional end-use parts with extended UV weathering stability

Nexa3D and Henkel launch new class of photoplastics for high-performance 3D Printing

Düsseldorf, Germany and Ventura, CA, USA – Nexa3D, the maker of ultrafast stereolithography production 3D printers, and Henkel today announced an expansion of their partnership with Henkel to immediately deliver three new performance photopolymer materials through its expanding Nexa3D channels globally. Nexa3D's further collaboration with Henkel leverages their combined capabilities to fast-track additive manufacturing towards mass production of functional parts across multiple industries, leveraging productivity advantages of its ultrafast NXE 400 3D printer.

The ultrafast NXE 400 manufacturing process offers multiple possibilities for greater design agility, supply chain resiliency and ultrafast implementation at every phase of the product lifecycle. Combining Nexa3D's productivity with Henkel's rapidly expanding portfolio of functional polymers, makes it possible for customers to manufacture a wider range of parts such as housings, enclosures, pipes, packaging products, footwear components and production tooling for greater performance and functionality.

- **xPP405-BLACK** is a tough semi-rigid material with high-strength engineering plastic delivering good impact resistance with performance similar to unfilled propylene. xPP405 boasts a modulus like polypropylene, an impressive 130 percent tensile elongation at failure, and excellent UV weathering stability as characterized by ASTM G154 testing. xPP405-BLACK delivers an attractive industrial black finish and is ideal for a wide variety of design, engineering and manufacturing of end use parts for piping, consumer and industrial applications, including large housings and enclosures and sheet metal forming

dies. To learn more about xPP405-BLACK, check out [this video](#) and the [Nexa3D materials page](#).

- **xPP405-CLEAR** combines clarity, toughness and impact strength with good heat deflection temperature between 50°C to 60°C. xPP405 boasts a modulus like polypropylene, an impressive 130percent tensile elongation at failure, and exceptional UV weathering stability as characterized by ASTM G154 testing. xPP405-CLEAR can be finished for excellent clarity and is perfect for a wide range of design, engineering and manufacturing of end use parts including packaging, bottling, piping and see-through elements such as transparent materials for light guiding applications and micro-fluidics as well as lighting applications. To learn more about xPP405-CLEAR, check out [this video](#) and the [Nexa3D materials page](#).
- **xPEEK147-BLACK** is a tough material with a good surface finish, and a strong dimensional stability featuring high heat deflection temperature. It is an ideal material for production tooling, molding applications and a variety of functional end use parts including automotive underhood applications. xPEEK147 exhibits higher temperature resistance of up to 230°C with very high stiffness and is shown to be thermally stable for long periods with good solvent resistance and dimensional stability. To learn more about xPEEK147-BLACK, check out [this video](#) and the [Nexa3D materials page](#).

“We are pleased to further expand our partnership with Nexa3D as Loctite’s portfolio of photo-plastic and photo-elastic materials are well-matched for the higher throughput of the NXE400 3D printer,” said Ken Kisner, Head of Innovation for 3D Printing at Henkel. “The Nexa3D team have continued to deliver robust 3D printing solutions, and together we look forward to continuing to deliver an expanded portfolio of production tools, materials, and the validated workflows that the industry requires to realize the full potential of additive production.”

“We believe that our rapidly expanding collaboration with Henkel, now spanning six Loctite materials, coupled with our demonstrated productivity gains achieved by our ultrafast NXE400 3D printer and up to 85 percent lower total cost of ownership, delivers higher productivity, better extended life functionality and exceptional economics,” said Kevin McAlea, Chief Operating Officer, Nexa3D. “Both companies are committed to democratizing access to scalable additive polymer solutions empowering customers to own their supply chain throughout their entire product life cycle from design to production and aftermarket success.”

The three new materials are immediately available through Nexa3D's growing network of resellers. [Contact Nexa3D](#) to find a reseller or to schedule your live 3D printing demo today via Zoom. To learn more about Henkel's innovation in 3D printing visit [LoctiteAM.com](#). To see how your organization can collaborate with Henkel, please email Loctite3DP@henkel.com.

About Henkel

Henkel operates globally with a well-balanced and diversified portfolio. The company holds leading positions with its three business units in both industrial and consumer businesses thanks to strong brands, innovations and technologies. Henkel Adhesive Technologies is the global leader in the adhesives market – across all industry segments worldwide. In its Laundry & Home Care and Beauty Care businesses, Henkel holds leading positions in many markets and categories around the world. Founded in 1876, Henkel looks back on more than 140 years of success. In 2019, Henkel reported sales of more than 20 billion euros and adjusted operating profit of more than 3.2 billion euros. Henkel employs more than 52,000 people globally – a passionate and highly diverse team, united by a strong company culture, a common purpose to create sustainable value, and shared values. As a recognized leader in sustainability, Henkel holds top positions in many international indices and rankings. Henkel's preferred shares are listed in the German stock index DAX. For more information, please visit www.henkel.com.

About Nexa3D

Nexa3D is digitizing the world's supply chain sustainably. The company makes ultrafast industrial grade polymer 3D printers affordable for professionals and businesses of all sizes. The company's photoplastic printers are powered by its proprietary Lubricant Sublayer Photo-curing (LSPc) while its thermoplastic printers are powered by Quantum Laser Sintering (QLS), both of which increase print speed and productivity by orders of magnitude. The company's partnerships with world-class material suppliers unlock the full potential of supply-chain approved polymers that are tailored for faster production at scale. Nexa3D's software optimizes the entire additive production cycle through process interplay algorithms to ensure part performance and production consistency, while minimizing material usage and waste to reduce energy consumption and carbon footprints. To learn more, visit www.nexa3d.com, like us on [Facebook](#), or follow us on [Instagram](#), [Twitter](#), and [LinkedIn](#).

Photo material is available at www.henkel.com/press

Contacts	Henkel	Nexa3D
	Sebastian Hinz	Josh Turner (Silicon Valley Communications)
Phone	+49 211 797 - 8594	+1 917-231-0550
Email	sebastian.hinz@henkel.com	turner@siliconvpr.com

Henkel AG & Co. KGaA



Partnership between Nexa3D and Henkel: 3D printed bottle mold using the new xPEEK147-Black material.



3D printed bottles using the new xPP405-Clear material: the excellent clarity enables new applications for end-use packaging or bottling for example.