



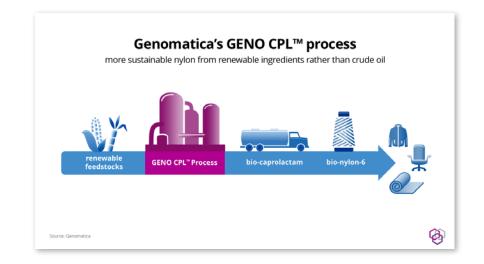
Aquafil and Genomatica join forces for bio-nylon – target more sustainable apparel, carpets and fibers

Aquafil to provide R&D collaboration and development funding; gains option for commercial plant

Trento, Italy and San Diego, CA, January 23, 2018 – <u>Aquafil</u> and <u>Genomatica</u> have announced a multiyear agreement to create sustainable caprolactam, a key ingredient to producing 100 percent sustainable nylon. The collaboration aims to develop a commercially-advantageous bioprocess (Genomatica's <u>GENO CPL[™] process</u>) to make caprolactam using plant-based renewable ingredients, rather than the crude oil-derived materials traditionally used by the nylon industry.

Enabling more sustainable nylon products

Used in a variety of nylon-based products including carpets and apparel, caprolactam has a worldwide market of over five million tons per year. Genomatica's <u>GENO CPL™ process</u> aims to provide an environmentally-friendly way to make caprolactam with better economics, including for smaller-scale plants. Additionally, it will enable licensees and their customers to differentiate themselves by offering a more sustainable bio-based product whose performance will be fully comparable with nylon made from crude oil-derived caprolactam, and which will not require any machine or process adjustments by the nylon supply chain. Genomatica is the licensor of the GENO CPL[™] process.



Genomatica's process to make biobased caprolactam aims to let Aquafil and others make more sustainable nylon apparel, carpets and fibers.

Aquafil is a leading producer of nylon yarn and launched the <u>ECONYL® Regeneration System</u> in 2011 to produce nylon made from 100 percent regenerated waste. A large and growing number of globally recognized sportswear, fashion, luxury and carpet brands choose ECONYL® as the sustainable ingredient for their product. Like the ECONYL® process, the <u>GENO CPL™ process</u> eliminates the significant amount of by-products common to most crude oil-derived caprolactam production, and will allow producers to diversify their sources in terms of raw material.





Opportunities for chemical producers, product makers and brands

Genomatica invites other leaders in the nylon value chain to join its bio-nylon program – and Aquafil encourages further collaboration with supply chain partners. By joining the program, companies ranging from chemical producers and product makers to agriculture companies and major brands can engage, influence priorities and gain access to Genomatica's technologies and supply of bio-based chemicals.

Supporting quotes

"As proven by the success of ECONYL[®], consumers and manufacturers look forward to opportunities to play an active role in the circular economy. We aim to be a leader of sustainability for nylon, and we are excited by the opportunity to be the first to bring the benefits of this new technology to our customers, which is perfectly in line with our commitment to creating sustainable products," said Giulio Bonazzi, Chairman and CEO of Aquafil. "Genomatica brings the technology, innovation and track record to help us achieve this."

"Visionary companies like Aquafil are delighting customers and gaining market share through more sustainable products," said Christophe Schilling, CEO of Genomatica. "This is another example of Genomatica applying the power of biology to rethink how widely-used chemicals can be made a better way. Just as we've surpassed key <u>milestones</u> for our commercial GENO BDO process and were named <u>winner of the ICIS Innovation Award</u> for our new naturally sourced butylene glycol, we now aim to bring biotechnology innovation to enable better nylon products."

About Aquafil

Since 1969, Aquafil has been one of the leading players, both in Italy and globally, in the production of polyamide 6 (nylon 6). The Aquafil Group has a presence in eight countries on three continents, employing more than 2,700 staff at 15 plants located in Italy, Germany, Scotland, Slovenia, Croatia, the USA, Thailand and China. For more information, visit <u>www.aquafil.com</u>.

About Genomatica

Genomatica is a widely-recognized leader in bioengineering. It develops biobased process technologies that enable a better way to produce widely-used chemicals, from alternative feedstocks, with better economics, sustainability and performance. Genomatica has earned widespread acclaim for its technology and commercialization achievements. Awards include the <u>Kirkpatrick Award</u>, for "the most noteworthy chemical engineering technology commercialized in the world" and the <u>ICIS Innovation</u> <u>Award</u>. To learn more, see <u>www.genomatica.com</u>.

For more information:

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