

# Genomatica introduces next process technology

GENO  $BG^{\mathbb{M}}$  process delivers naturally sourced, sustainable butylene glycol for personal care; proven bioengineering capabilities drive rapid commercialization of another high-yield process

San Diego, CA, August 11, 2017 – Genomatica today announced its latest innovation, the GENO BG<sup>™</sup> process, a new biobased process technology to make a naturally sourced 1,3-butylene glycol. The GENO BG process has already produced biobased butylene glycol for sampling and Genomatica has transferred the process to 85,000 liter production fermentors.

## A naturally sourced alternative; distinctively pure product

Butylene glycol, a four-carbon alcohol, is used globally in cosmetics to improve moisture retention and as a carrier for plant extracts. Conventional approaches to make butylene glycol start with fossil fuel-derived acetaldehyde, which is a toxin, an irritant, and a carcinogen.

By contrast, Genomatica's biobased butylene glycol is made via fermentation, starting from natural, sustainable, plant-based ingredients. This approach has the potential for high appeal in personal care products.



Genomatica has begun to produce Bio-BG™ butylene glycol in large scale, 85,000 liter fermentation tanks at EW Biotech in Leuna, Germany.

Additionally, Genomatica has leveraged the power and selectivity of biology to create a process that produces a distinctively pure product as compared to fossil fuel-derived, chemistry-based processes. Product purity and performance, plus a simpler process design that is readily deployed at large scale, also have the potential for additional market applications in everyday wellness products.

# Already recognized for innovation by the chemical industry

GENO BG's innovation was met with immediate recognition by a panel of industry experts. ICIS, the world's largest petrochemical market information provider, announced that Genomatica was named



today as a finalist for the <u>2017 ICIS Innovation Awards</u>. These awards recognize innovation in products and processes with better use of energy and raw materials, improved economics, safer performance, and lower environmental impact. Winners will be announced in October.

The GENO BG process, developed in stealth, has advanced even faster than Genomatica's award-winning commercial GENO BDO™ process, which recently highlighted <u>milestones</u> for rapidly meeting plant performance guarantees and total worldwide production.

"The GENO BG process marks our entry into specialty chemicals, complementing our leadership in intermediates," said Christophe Schilling, Genomatica's CEO. "GENO BG is another example of how quickly we can commercialize our bioengineering innovations and enable products with better performance and greater sustainability."

#### **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 Kirkpatrick Award, for "the most noteworthy chemical engineering technology commercialized in the world". To learn more, see <a href="https://www.genomatica.com">www.genomatica.com</a>.

### For more information

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