



Daicel to be responsible for marketing of Genomatica's biobased 1,3-butylene glycol in Asia-Pacific

Cosmetic ingredients leader to help build market for Genomatica's naturally sourced, sustainable 1,3-butylene glycol

San Diego, CA, and Osaka, Japan, December 14, 2017 – Genomatica and Daicel Corporation today announced that Daicel will be responsible for marketing Genomatica's new, naturally sourced, award-winning 1,3-butylene glycol, in the Asia-Pacific region. Daicel earns revenues of USD \$4 billion per year and is a leading supplier and marketer of ingredients for the personal care industry.

A naturally sourced, sustainable alternative; Genomatica's biobased 1,3-butylene glycol already honored for innovation

1,3-Butylene glycol, a four-carbon alcohol, is commonly used in personal care products to increase moisture retention (as a humectant), improve texture and provide antimicrobial properties. Additionally, it is used as a solubilizer for plant extracts, flavors and fragrances. Genomatica produces biobased 1,3-butylene glycol from natural, plant-based sugars using its safe and sustainable fermentation-based process technology. This new approach has high appeal in personal care applications where demand for natural ingredients is growing. Genomatica's technology and product has already been recognized with the prestigious ICIS Innovation Award.

Daicel to identify customers and applications for Genomatica's naturally sourced 1,3-butylene glycol in Asia-Pacific

The cosmetic market in the Asia-Pacific region has been growing rapidly, and demand for natural cosmetics has been growing twice as fast. The initial focus of the collaboration will be to identify potential customers for Genomatica's naturally sourced 1,3-butylene glycol in the personal care market plus additional potential markets. Genomatica has been producing tons of biobased 1,3-butylene glycol for sampling since mid-2017.

"Daicel has tremendous experience with and understanding of the personal care market," said Damien Perriman, Genomatica's Senior Vice President, Specialty Chemicals. "We're delighted to be working with them and look forward to advancing our partnership in natural and sustainable ingredients."

About Daicel

Daicel Corp. (TSE: 4202), headquartered in Osaka, Japan, contributes to an improved quality of life by meeting the needs of society. The company's consolidated revenues for fiscal 2016 (ended March 31, 2017) totaled 440.1 billion yen (\$3.9 billion). The Daicel Group takes pride in providing the best solutions based on our unique technologies, including cellulose chemistry, organic chemistry, polymer chemistry, and pyrotechnic engineering with approximately 10,000 employees worldwide. For more information on Daicel, please visit the company's website at http://www.daicel.com/en/.





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" and the ICIS Innovation Award. To learn more, see www.genomatica.com.

For more information

For Daicel: Koichiro Nishioka, yuki@jp.daicel.com, +81.3.6711.8213

For Genomatica: Steve Weiss, sweiss@genomatica.com, +1.858.210.4424