



Candle power

With its Nobel Prize-winning olefin metathesis technology, can Elevance Renewable Sciences transform the specialty chemical industry?

JOSEPH CHANG/NEW YORK

SLICK START-UP Elevance Renewable Sciences has big ambitions. The natural oils-to-specialty chemicals firm, which launched in March, aims to increase annual sales from about \$20m (€13m) today to \$1bn/year by 2016 through partnerships and acquisitions.

With its first joint marketing alliance – with Cargill Refined Oils Europe – Lisle, Illinois, US-based Elevance aims to break into the near \$1bn candle wax market in Europe by pushing the advantages of renewable substitutes.

“Now, as paraffin supplies worldwide start to diminish both because of petroleum crude refining practices, as well as the trend towards using renewable products, many wax producers are looking for substitutes,” said Elevance CEO K’Lynne Johnson in an interview with ICIS. “We believe we can bridge most if not all of the performance gaps from paraffins.”

Elevance’s performance-based waxes enable much higher fragrance concentrations and delivery for candles, says Johnson.

And scented candles are finally catching on in Europe. “Historically, this has not been

a big driver in Europe as it has in the US, but there is a shift going on there now towards fragrance delivery,” she says.

The global candle wax market represents a \$2.3bn opportunity, notes Johnson.

Elevance announced its joint marketing alliance with Cargill Refined Oils Europe on April 16. The partnership will provide new candle and wax corrugated packaging



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K’Lynne Johnson, CEO, Elevance

products to European customers.

Elevance is working on developing new wax coatings for cardboard packaging, which will be more cost-effective and provide better surface characteristics.

Elevance uses olefin metathesis chemistry, driven by Nobel Prize-winning technology developed by US-based catalyst company

Materia and Nobel Laureate Robert Grubbs of the California Institute of Technology.

The catalyst technology allows carbon atoms in natural oils to “swap” places, enabling the development of new chemical compounds and manufacturing processes, says Elevance. Natural oils used as feedstock include soybean, canola, corn and sunflower.

Privately held Elevance has received more than \$40m in funding from venture capital funds TPG Growth and TPG Biotechnology Partners to institutionalize work started by Cargill and Materia in 2004

PARTNERSHIP PLATFORMS

The company has three platforms – functional oils (candles, personal care and cosmetics, coated paper and packaging, solvents and adhesives), antimicrobials (for personal care, disinfectants, coatings, fungicides and textiles), and lubricants and additives (motor oil and hydraulic fluids).

Elevance is seeking to be a major partner for the specialty chemical industry.

“Because our technology enables us to create a wide range of products, we’ve elected to take a partnering approach to market introductions,” says Johnson. “This will give us access to many more markets in a faster time period.”

The next alliances will likely be in functional oils for personal care products, and in antimicrobial products.

“The personal care and cosmetics market is a huge one, and we are in the process of launching a commercial product with a partner in the next two months,” says Johnson. “Later, we expect to announce a partnership in antimicrobials.”

Elevance has developed a broad-spectrum antimicrobial based on natural oils that can also make other antimicrobials more effective, according to Johnson. “And it is less toxic by a significant factor over others in the market,” she adds. Elevance will not use the typical chemical industry model of building production facilities. Rather, it will employ an asset-light model of contract manufacturing through Cargill and other companies.

For its partners, the company’s technologies allow for production in smaller reactors or stills rather than the large plants typically associated with petrochemical-based specialty chemicals.

In an industry often struggling to boost return on capital, this could fit the bill. ■

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