



PRESS RELEASE

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Econic Launches Recreaire™ Carbonate Ethoxylates Made From CO₂

The new family of surfactants replaces traditional feedstocks without sacrificing performance

Econic Technologies, has introduced Recreaire carbonate ethoxylates, a first-of-its-kind family of surfactants based on CO₂. These new surfactants use carbon dioxide as a raw material, replacing traditional oleochemicals and a portion of fossil-based materials while improving sustainability, performance, and cost at scale.

Recreaire is a flexible platform technology that can deliver sustainable analogues to a wide range of alkoxyate surfactants. Including varying amounts of CO₂ (up to 45% by weight) introduces new properties to the molecules, which can offer unique benefits for applications in the cleaning, personal care, coatings, agrochemical, and metalworking industries.

To demonstrate proof of concept, Econic is showcasing three fatty alcohol ethoxylate (FAE) alternatives for surfactants manufacturers who may be interested in commercializing the technology. The company will highlight these at the ACI Future of Surfactants Summit in Rotterdam on June 11 and 12.

All Recreaire carbonate ethoxylates are biodegradable, colorless, odorless, and have no detectable 1,4-dioxane. An independent Life Cycle Analysis shows they deliver up to a 65% reduction in global warming potential (GWP) compared to conventional fatty alcohol ethoxylates. This figure climbs to 75% when comparing the hydrophobe components of Recreaire FAE replacements to conventional fatty alcohols.

“We’re at the beginning of an exciting journey. Recreaire is a game-changing technology that solves customers’ long-term needs for scalable and sustainable, high-performing products,” said Simon Bennett, the company’s commercial director for surfactants.

“Recreaire surfactants deliver compelling technical and sustainability performance by unlocking the benefits of CO₂. Our team has been working with one of the world’s leading consumer goods companies to deliver new opportunities, and we are excited to be extending the Recreaire technology further to a range of other markets,” said Anthea Blackburn, Econic’s technical director for surfactants.

The launch of Recreaire is the most recent addition to Econic’s portfolio of renewable carbon technologies. The company also offers polyols based on carbon dioxide. It has several manufacturing partners and commercial agreements with polyol producers in the US, Europe, and Asia.

About Capricorn Partners

Capricorn Partners is an independent European manager of venture capital and equity funds, investing in innovative European companies with technology as competitive advantage. The investment team of Capricorn is composed of experienced investment managers with deep technology expertise and a broad industrial experience. Capricorn Partners is managing the venture capital funds Capricorn Sustainable Chemistry Fund, Capricorn Digital Growth Fund, Capricorn ICT Arkiv, Capricorn Health-tech Fund, Capricorn Healthtech Fund II and Capricorn Fusion China Fund. In addition it is the management company of Quest for Growth, quoted on Euronext Brussels, and the investment manager of Quest Cleantech Fund, a sub-fund of Quest Management SICAV, registered in Luxembourg. www.capricorn.be

About Econic Technologies

Econic Technologies is a UK-based deep tech company focused on renewable carbon. Its innovative catalyst and process technology allows manufacturers to produce polymers based on CO₂ instead of petrochemicals. The use of CO₂ enhances sustainability while creating more cost-effective, higher performing end products. Econic licenses its technology to polyols and surfactant manufacturers that supply some of the world’s most iconic consumer brands. Econic was founded in 2011 by Dr. Charlotte Williams at Imperial College London. The company is part of Cleantech Group’s Global Cleantech 100. Its global headquarters are in Alderley Park, UK just outside of Manchester. www.econic-technologies.com

