

IN BRIEF

WORLD: The global detergent market value is expected to reach US\$205.2bn by 2025, according to a report released on 28 November by Grand View Research, which puts CAGR at around 4.9% from 2017 to 2025. Rising penetration of washing machines in developing economies was expected to propel growth with powder detergents seen as the biggest product segment in the market, accounting for over 31% of total revenue in 2016.

Grand View Research said the top brands of the laundry detergent market included Tide, Purex and Surf and the four companies which controlled the laundry detergent industry were Procter & Gamble, Unilever, Church & Dwight and Henkel.

USA: On 18 October, Croda International marked the latest expansion at its Atlas Point site in New Castle, Delaware, with a plant that will produce renewable, bio-based non-ionic surfactants.

"This expansion of the Atlas Point facility enables Croda to use bioethanol derived from natural feedstocks for the manufacture of its renewable surfactants," the company said.

Croda's new range of non-ionic renewable surfactants, marketed under the Eco brand, can be used in cosmetic and hair care products in the personal care industry, lubricants and coatings in the automotive industry, air- and floor-care products in the cleaning industry, as well as drilling fluids in the oil industry.

EUROPE: Speciality chemicals producer Clariant has launched a new renewable surfactant for hand dishwashing liquid detergents based on European sunflower oil and glucose.

The GlucoPure Sense branded surfactant did not carry any irritant labels, was free of ingredients sourced from the tropics and achieved comparable performance to traditional surfactants, Clariant said in a statement on 12 October.

The product consisted of 100% renewable sunflower oil and glucose and had a Renewable Carbon Index score of more than 96% and active matter of between 50-55% oleyl glucamide.

Clariant and Huntsman drop plans for US\$20bn merger

Swiss speciality chemicals firm Clariant and American chemicals and surfactants producer Huntsman have called off their proposed US\$20bn merger after encountering scepticism from a part of their shareholder base.

The deal would have created the world's second biggest speciality chemicals company, behind Germany's Evonik, according to *Fortune* (see also *OFI Renewable Materials News, June 2017*).

According to joint statement by Clariant and Huntsman on 27 October, the merger – originally agreed on in May – was terminated due to activist investor White Tale Holdings increasing its Clariant stake to more than 20%. White Tale, alongside other shareholders, had opposed the deal on the grounds that it would destroy shareholder value.

"We believe that there is simply too much uncertainty as to whether Clariant will be able to secure the two-thirds shareholder approval that is required to approve the transaction under Swiss Law," Clariant CEO Hariolf Kottman and Huntsman

CEO Peter Huntsman said.

Due the unclear status of the merger, the companies jointly decided to scrap the merger plans and continue operations as separate entities.

The termination agreement did not impose contract break fees on either party, which in Clariant's case meant the company did not have to pay the US\$210M deal breakage fee nor the US\$60M extraordinary general meeting non-approval fee.

The merger, which the boards of both companies had considered the best available option in the face of a challenging global chemicals market, had been scheduled to close by the end of 2017.

In the edible oils sector, Huntsman supplies the home and personal care industries with surfactants based on renewable oils, including products such as castor oil ethoxylates, fatty acid alkanolamides, fatty alcohol alkoxyates and various ethoxylates.

Clariant supplies the edible oil industry with its Tonsil brand bleaching earth.

Goodyear uses soya oil to improve tyre performance

Global tyre and rubber manufacturer Goodyear has introduced the first commercially available passenger car tyres made out of a new all-weather performance-enhancing soybean oil-based rubber compound.

The new Assurance WeatherReady branded tyres, developed by a team of Goodyear scientists and engineers with support from the United Soybean Board (USB), hit stores in September, the company said in a statement.

The new tread compound, which used soybean oil, gave the tyres the advantage of being softer at lower temperatures, which increased their grip on the road surface in dry, wet and



PHOTO: AUTOCRAZE

winter conditions, Goodyear said.

Company tests showed that the soybean oil rubber mixed more easily in the silica-reinforced compounds used in manufacturing certain tyres, which also improved production efficiency and reduced energy consumption.

The tyre firm developed the

new compound with partial funding from the USB's soybean checkoff programme, which supports the US soybean industry.

"Businesses looking to use soya, even if for sustainable purposes, want to see not only a price-competitive product, but one that functions the same or better than their original product," said John Motter, USB chair and soya farmer from Jenera, Ohio.

"When we started working with Goodyear more than six years ago, it was just an idea, a way to build demand for soybean oil. Now, we have a tyre that shows what soya can do on the road," he added.

Sunflower oil capsules used to fix road potholes

Researchers at the University of Nottingham (UoN) in England are developing a technique to make fixing pothole-ridden roads easier, with the help of sunflower oil capsules.

Headed by Alvaro Garcia, lecturer at the faculty of engineering at UoN, the scientists used the spherification technique to create caviar-like sunflower oil capsules that could be placed in the asphalt used to pave roads, the UoN said in a statement on 18 October.

When the road begins to crack, the capsules would break and the released oil would soften the asphalt around it, causing it to stick back together, thus preventing the asphalt from deteriorating further.

Garcia said he got the idea to develop the

capsules after watching an episode of the Spanish version of the *Master Chef* TV show, where a contestant used a similar method in cooking.

According to Garcia, this new Capheal technology could withstand the mixing and compaction processes in road paving without significantly affecting the asphalt's properties.

"More importantly, we found that the cracked asphalt samples were restored to their full strength two days after the sunflower oil was released," Garcia said.

He estimated that the technology could increase a road's lifespan by at least one-third from 12 to 16 years while costing approximately the same as other common additives used in asphalt paving.