New premises for distributor

Aston Chemicals has recently invested in new premises in Aylesbury, UK. The new building provides 30% more office, warehousing, sample storage and laboratory space, and has been built to the latest environmental building standards. The new laboratory provides the extra space required for Aston's growing formulation development team, who create innovative formulations to demonstrate the functions and benefits of raw materials and develop formulations to meet customers' specific requirements.

In addition, Aston Chemicals was recently awarded the SA8000 (Social Accountability) and ISO14001 (Environmental Responsibility) international standards by Bureau Veritas. These accreditations demonstrate Aston Chemicals' commitment to protecting the environment and acting fairly and decently in all aspects of business.

Guide for damaged hair

To help its customers better understand hair damage, Croda has launched an updated, iPad-friendly version of its interactive, electronic Hair Damage Guide that explores the various types of hair damage, how each occurs and how these can be duplicated in a laboratory setting to test the efficacy of new product technologies. New and proven solutions for preventing and reversing hair damage are explained in terms of science and consumer perception. The Hair Damage Guide is fully integrated into Croda's website, which gives customers unlimited access to formularies and product information designed to assist them with their projects.

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Sustainability recognition

CDP has just announced that global specialty chemical company Croda International Plc is featured on their 'Climate Disclosure Leadership Index' for leading on climate change transparency, which is an integral part of the company's continued commitment to sustainability.

One of only 41 companies in the FTSE 350 to feature on the Leadership Index, the leading position is indicative of high scores based on good internal data management and understanding of climate change related issues affecting the company. These issues include greenhouse gas emissions, emissions reduction targets and the risks and opportunities associated with climate change.

The Leadership Index, compiled by PwC on behalf of CDP (formally known as Carbon Disclosure Project), is based on analysis of the company's responses a CDP's questionnaire and provides an evaluation tool for institutional investors and other stakeholders to assess the businesses commitment to climate change.

Dr Terence Thistlethwaite, VP of Sustainability at Croda International, commented: "We are delighted to be included in the Climate Disclosure leadership Index. It is further recognition of the excellent progress we are making towards sustainability and follows our inclusion on Corporate Knights Global 100 Most Sustainable Corporation in the World listing earlier this year."

COMMENT

Ingredients come under the media spotlight

Preservatives in personal care products have undergone a tough time in the media of late, with scare stories appearing almost every month in various newspapers, blogs and websites. The stories highlight instances of acute sensitivity to hair and skin care products, which have resulted in unpleasant outbreaks of contact dermatitis.

The recent coverage of MIT (page 10) may well have legitimate and reliable sources, but the fact the media were the first recipients of the data, rather than the relevant industry bodies, simply allowed the newspapers to build up a good deal of righteous indignation before the industry was able to properly respond. Terms such as 'epidemic' serve only to frighten consumers unnecessarily, and linking chemicals in cosmetics to those found in household cleaning products simply displays a complete lack of industry knowledge. It is clear, the national press is no place for holding informed and balanced discussions on this subject.

The modern personal care industry has a fantastic record of putting the safety of consumers first, and every product to reach market must undergo a series of very rigorous safety assessments. However, when improvements can be made, it is for the benefit of everyone that the proper channels are taken.

Richard Scott
Editor

Alternative preservative introduced

Jeen International Corporation has announced the introduction of an alternative preservative product, Jeecide MCA-1.

Based on industry demand and increasing preservative regulatory pressures, Jeen researchers have developed a unique alternative approach, the Jeecide Microbial Control Alternative (MCA) series. The initial product in this series is Jeecide MCA-1, a unique liquid blend of organic acids and proprietary efficacy boosters in a glycerin base.

Since it does not contain traditional preservatives, the product can be included in formulations carrying 'preservative-free' claims. Mild, yet effective, Jeecide MCA-1 imparts little odour or colour to a wide range of leave-on and rinse-off personal care and cosmetic products for skin and hair applications.

The organic acids provide primary, broad-spectrum microbial control boosted by the efficacy enhancers. In addition, the chelating and antioxidant benefits of the organic acids provide a secondary antimicrobial effect to further increase the effectiveness of the overall microbial control system.

Jeecide MCA-1 contains globally acceptable components and is well-positioned as an alternative to widely used preservatives such as parabens, isothiazolinones, formaldehyde releasers and phenoxyethanol. This approach is particularly applicable in Europe and various Asia-Pacific regions where traditional preservatives are under greatest pressure.

Madagascar gets expertise

After South America with Peru and West Africa with Burkina Faso, Greentech begins a new convention with Madagascar.

Greentech is closely working with the University of Antsiranana and has equipped a research laboratory, specifically for the development of new cosmetic active compounds. Greentech has supplied all necessary equipment for plant extraction and analytical control of these cosmetic ingredients.

A new common structure, GREENMadag, has been especially created for the development of new actives from local flora rich in medicinal applications. As well, an educational programme for the development of competent technicians is in progress.

The first steps of development of cosmetic ingredients and extraction assays will be realised

in the GREENMadag laboratory and then scaled-up phases will be performed in Greentech's laboratory.

In this way, there will be a new added-value market for local producers of raw materials, new employment for engineers and technicians in Madagascar and thus new income for local communities.

Eco-friendly emulsifier

One of the megatrends in the field of personal care and cosmetics is sustainability. Simultaneously, protection against UV rays is a major topic as well in the cosmetic market.

Hence, the ability to emulsify and stabilise UV filters is a key property for raw materials, especially for emulsifiers. To address these trends, Tego Care PBS 6, a novel, unique and eco-friendly polyglyceryl based emulsifier from Evonik was developed. The emulsifier is fully based on renewable sources. Thus, Tego Care PBS 6 is Natrue as well as Ecocert approved natural.

Tego Care PBS 6 covers the need of sustainability while providing the emulsification stability of sun care formulations containing a high load of water soluble UV filters or other challenging ingredients. Stability tests including different raw materials like water soluble UV filters, insect repellents and natural preservatives have been performed. All these tests have confirmed that Tego Care PBS 6 is a powerful O/W emulsifier particularly suitable for low-

viscous sun care lotions and sprays. Beside its excellent stabilisation capacities this new emulsifier provides moisturising properties as proven in an *in vivo* study.

Possible applications for Tego Care PBS 6 are sun care lotions and sprays, as well as insect repellent applications, facial serums for daily SPF protection or natural based lotions. An additional benefit of the newly launched emulsifier is that it is SFDA registered.

Natural slimming ingredient

Drawing on research advances concerning the hypodermis and, more specifically, adipocyte stem cells, Silab proposes Stemsvelt, a slimming and anti-cellulite active ingredient, rich in silybin, a polyphenol derived from the milk thistle plant.

Tested *in vitro* on innovative cell models, Stemsvelt prevents adipocyte stem cells/progenitors from entering the differentiation programme. It thereby limits the formation of new adipocytes and the accumulation of lipids in lipid vacuoles. It also stimulates the lipolytic activity of mature adipocytes and promotes the elimination of lipids stored in the adipose cells.

Tested *in vivo*, Stemsvelt reduces the unattractive orange peel appearance of the skin and refines the silhouette; its efficacy is optimised by the use of a massage tool. Cellulite is smoothed and the skin is visibly enhanced, firmer and more toned.

Two new patents

Presperse was recently granted US Patents for two of their products: SiClone SR-5 and SiClone TD 150. The main focus of these ingredients is their non-silicone based compositions, an accomplishment in regards to the hesitation to use silicones in cosmetics.

SiClone SR-5 is composed entirely of hydrocarbons, maintaining silicone-like aesthetic and volatility properties while eliminating the need for cyclopentasiloxanes. This product can be used for full or partial replacement of volatile silicones.

SiClone TD-150 utilises SiClone SR-5 in its composition, allowing several important benefits with its use. This particular ingredient is a non-silicone dispersion based on hydrocarbons, providing ease of use and eliminating the need for a wetting agent which can often cause instability.

Silicones firm and distributor added

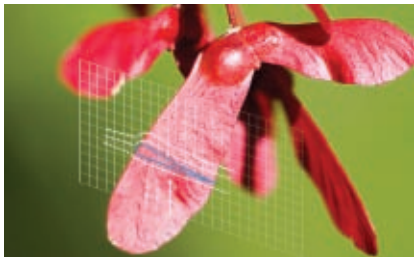
Innospec Inc. has announced that it has acquired Chemsil Silicones Inc and the Chemtec Chemical Co., from its private owners.

Chemsil develops and markets silicone-based formulations to the personal care industry. Chemtec, which distributes a wide range of personal care ingredients, is focused on customers on the West Coast of America. The companies have combined sales of $40 million.

Commenting on the deal, Patrick Williams, president and CEO of Innospec said: "Personal care is the strategic core of our performance chemicals business, and we have been seeking to add to both the technology base and the geographical footprint of this business. We are delighted to acquire Chemsil, which brings complementary technologies to our current portfolio, and Chemtec, which provides us with a solid base in the important West Coast market. We expect the acquisition to be immediately accretive."

James Harrison, president of Chemsil and Chemtec said: "Although we have been pleased with the growth of our companies over the past few years, we have concluded with our lead advisors CIM Partners that we needed to be part of a larger group to realise our ambitions to grow our presence in the US, and to market our technologies internationally. Joining Innospec provides us with the infrastructure and critical mass to accelerate that expansion and focus on future technologies."

Chemsil will become part of Innospec's Performance Chemicals business, which develops and markets a range of surfactants and emollients to the personal care industry. Chemtec will continue to operate as a key distributor in this market, offering a high level of customer service.



Antimicrobial stabiliser launch

Like the wings on maple seeds that boost seed dispersal, natural evolution produces organisms uniquely suited to their environment or function. Inspired by this efficiency, schülke has created sensiva PA 40, an antimicrobial stabiliser blend uniquely suited for leave-on, wet wipe and sensitive formulas. It combines natural, nature-identical and gentle synthetic materials to produce a multifunctional additive empirically designed to meet the changing preservation needs of the personal care industry.

The evolution of protection, sensiva PA 40 has improved the efficiency and efficacy of non-traditional preservation systems.

Stabilising vitamin C

Australian botanical extract manufacturer, Native Extracts announces what they describe as a 'world breakthrough' in that their advanced 'cellular' extraction process stabilises vitamin C for extended periods in an aqueous matrix, redefining expectations in cosmetic product performance. This breakthrough will have an impact on future directions for products and consumer benefits in the cosmetic, pharmaceutical and nutriceutical industries.

Vitamin C is notorious for being highly unstable and dissipates rapidly in solutions. Vitamin C is used extensively in cosmetic and pharmaceutical products for its powerful antioxidant and anti-inflammatory properties. "Independent scientific analysis reports Native Extracts' advanced extraction process delivers what the cosmetic industry has been waiting for; a natural source of highly stable vitamin C so their products can deliver the full benefits of this superior antioxidant," said Ross Macdougald, CEO Native Extracts.

Preservative-booster

DuPont Tate & Lyle Bio Products Company LLC announced that the latest additions to Schülke & Mayr's sensiva line, sensiva PA 30 and sensiva PA 40, both feature the natural, preservative-boosting ingredient, Zemea propanediol.

Zemea is a natural, 100 per cent biobased ingredient made from corn starch through fermentation and developed for use in the cosmetics and personal care market. It is a high-performance, environmentally friendly alternative to petroleum-based glycols and glycerin, where the product's lack of skin irritation, improved moisturisation and sensory properties are benefits. Zemea is approved as a natural ingredient by Ecocert and the Natural Products Association; it is certified 100 per cent biobased by the US Department of Agriculture and has both Kosher and Halal certifications.

Ingredient offers infrared protection

New studies performed in 2013 on Venuceane, Sederma's anti-ageing active that offers ultraviolet (UV) protection, demonstrate it to be also highly efficient against infrared (IR)-ageing.

Both UV and IR induce skin damage but in different ways. An efficient IR protection requires specialised strategies that involve an adaptive response to increased heat (specific to IR radiation) and the counteraction of IR-induced ROS production. Venuceane has successfully been demonstrated to do just this.

The ingredient improves hydration via the protection of the mitochondrial integrity known to be particularly damaged by IR radiation (ATP synthesis and mitochondrial water content increased by 79%). It also lessens the inflammatory conditions (PGE2: –54%, IL-6: –53%, IL-8: –61%, *vs.* IR-irradiated control), and prevents the denaturation of matrix macromolecules in order to limit wrinkle formation (collagen I: +70%, fibrillin-I: +28% *vs.* IR-irradiated control).

Venuceane is an anti-ageing active that meets expectations for a new generation of photo-protection based on UV and IR protection.

Derived by biotechnology, Venuceane, is a ferment that is rich in multifunctional and stable enzymes. In addition, it also complies with Chinese regulations for cosmetics ingredients.

Addition to popular sun care range

Ashland Specialty Ingredients is now offering Escalol HMS ultraviolet (UV) filter technology to sun care product manufacturers throughout the world. A legacy technology first reviewed by the FDA in 1978, the United States Pharmacopeia (USP) grade (INCI: Homosalate) is a popular UVB filter in sun care products. Ashland added the UV filter technology to its popular line of Escalol UV filters to meet growing demand and to better support a range of broad-spectrum UV formulation solutions.

"Changing formulation trends and new regulations are prompting new demand for a well- established sunscreen introduced more than 30 years ago," said Anna A. Gripp, global marketing manager, skin care and sun care, Ashland Specialty Ingredients. "Our technical team has worked with homosalate for many years on projects that involve broad-spectrum UVA and UVB protection strategies. Today we are pleased to add this technology to our commercial offering."

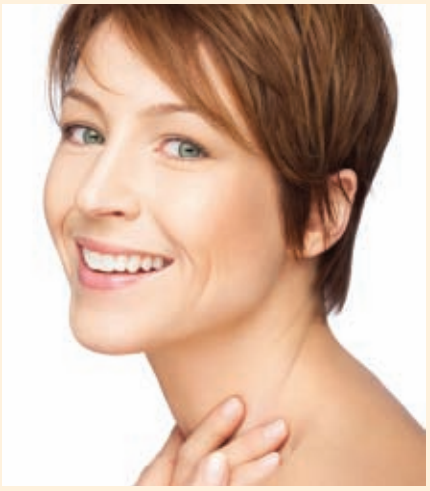
Manufacturers of sunscreens may use Escalol HMS UV filter at levels as high as 15 per cent in the US and 10 per cent in the European Union. Oil soluble, the UV filter is compatible in a range of lotion and spray systems. Formed from salicylic acid and 3,3,5-trimethylcyclohexanol, Escalol HMS UV filter absorbs medium wavelength rays within the UVB spectrum.

Sunflower gives high-purity phosphatidylcholine

Phosphatidylcholine (PC) is a fraction of the multifunctional near-natural raw material lecithin, and thereby a fundamental component of all cell membranes. It contains linoleic acid and choline, important substances that cannot be synthesised by the human body, and that have outstanding properties as skin protection components. With its new BergaSom product range, Berg+Schmidt offers quality-oriented cosmetics manufacturers a powerful active ingredient with unique possibilities in the formulation of modern products.

Thanks to intensive research, Berg+Schmidt can offer its innovative BergaSom with soy-based phosphatidylcholine or with high-purity fractions based on sunflower lecithin. Sunflower, a raw material source that consumers know and like, offers numerous advantages: It allows circumvention of the GMO question, and it has a high proportion of linoleic acid, a substance with valuable skin care properties. Hydrogenated and non-hydrogenated fractions from both sources round out the BergaSom product range and give manufacturers a wide variety of ways to optimise their face, body, hair and baby care products.

Non-hydrogenated BergaSom has a high proportion of linoleic acid, making beneficial for skin damage such as acne. "It is needed in order to produce liposomes that enable active ingredients to penetrate into the skin,"



explained Florence Jonnard, R&D director at Berg+Schmidt. "This raw material can also be used to make high-quality emulsifier-free nanoemulsions and lipogels."

Milan show this month

The online registration has now opened for Making Cosmetics, Milan (26-27 November 2013). Attendees can register free of charge to enter the exhibition and attend all seminars (limited seating) at the first edition of Making Cosmetics in Italy and third of its series.

With 47 scientific presentations, 40+ exhibitors and 67 represented suppliers, Making Cosmetics together with Formulating Cosmetics is designed to meet the needs of everyone involved in developing and delivering personal care products that are fit for purpose, stable and compliant. It is packed with free content offering great value opportunity for all attendees.

Consumers have shown they continue to be inspired by cosmetics – even during difficult economic times. So Making Cosmetics is an event not to be missed for formulators who want to be on top of the latest developments.

More information is available at www.making-cosmetics.it

Cranberry extract license

As part of a new strategic initiative, aimed at strengthening its presence in cranberry derivatives, Indena has entered an industrial and commercial agreement with Pharmatoka.

On the basis of this agreement, Indena will produce Gikacran under exclusive license for Pharmatoka and will directly market Gikacran in Japan, South Korea, China, India and Russia.

Gikacran is a well characterised cranberry juice (*Vaccinium macrocarpon* Ait.) extract, standardised so as to provide 17%-22% total proanthocyanidin (PAC) measured by DMAC method. 200 mg of Gikacran, containing 36 mg of cranberry proanthocyanidins (PACs), provide the same amount of PACs as found in 40 g of fresh fruits. Gikacran has been used since 2006 in different products in and outside Europe under the brand names Urell and Ellura. It is also available in Malaysia as a traditional herbal medicine.

New anti-ageing products

Merck has expanded its portfolio of products for the cosmetics industry to include two new technologically sophisticated active ingredients in the RonaCare range. Whereas RonaCare Bronzyl creates an even, natural-looking tan; RonaCare Pristine Bright produces a flawless, porcelain-like complexion. Both products are based on patent-protected compounds discovered and developed in-house by Merck.

Scientific studies have demonstrated their efficacy. The active ingredients RonaCare Bronzyl and RonaCare Pristine Bright take into account different, and in some cases, culturally-driven preferences. Sun-tanned skin remains a beauty ideal in western societies, whereas light-coloured skin is particularly prized in Asian cultures. Common to both is the desire to prevent signs of skin ageing – an effect that both ingredients offer.