

News Release

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BASF Personal Care presents digital progress at in-cosmetics 2023

- **BASF's Re_think concept drives sustainable innovation in the personal care industry through digitalization**
- **Surfactant Navigator and SFA Formulator enable BASF to digitally support its customers in formulations**
- **New digital tool enables end-to-end traceability in argan oil supply chain**

Barcelona, Spain – March 21, 2023 – BASF Personal Care will kick off this year's in-cosmetics with [Re_think](#). This concept encompasses BASF's commitment to the personal care market with a focus on health, sustainability and transparency to reshape and reinvent personal care for a sustainable future. In doing so, BASF is also meeting the changing expectations of consumers who are making health and well-being, as well as protecting the environment, guiding motives in their decision-making. This is driven by a desire to limit impact, reduce waste, resource and energy consumption, and use products that are sustainably sourced and produced.

Digitalization enables industries to transform and accelerate sustainable innovation. BASF offers digital services to its customers to support the development of sustainable formulations. The company recognizes that most sustainable innovations are not "drop-in" solutions and that reformulations are often required. As a result, the company is using modelling and simulation-based digital services to provide combinations of sustainable materials that offer performance and sensory advantages over less sustainable benchmarks. At this year's trade fair in Barcelona, BASF Personal Care is introducing new developments that solidify digitalization as a key pillar in its Re_think journey.

Surfactant Navigator: Mastering high performance sustainable surfactant solutions with digitalization

The global discussion around digitalization and how it can serve as an enabler to develop cosmetic formulations with high-performance and sustainable ingredients is gaining momentum. Customers are constantly looking for innovative, differentiating and sustainable solutions to meet consumers' needs. Modeling and simulation-based digital services are BASF's answer to key challenges and the latest demands in the personal care industry. The company's new digital service, [Surfactant Navigator](#), provides customers with suggestions for surfactant mixtures based on systematic experiments and modeling algorithms. The three main modules, Surfactant Finder, Smart Surfactant Replacement and Smart Surfactant Optimizer, offer formulators comprehensive and easy-to-use search capabilities, including smart filters for physicochemical parameters, naturalness, and alternatives to sulfated and EO-based surfactants. Users can leverage suggested combinations between other surfactants and BASF's high-performance, natural-based specialty surfactants to achieve even better performance. Surfactant Navigator not only provides formulators with the desired surfactant solutions that match their priorities, but also helps them to replace current surfactant combinations with natural-based alternatives without compromising on performance.

A new digital service for sustainable and versatile SFA-based liquid rinse-off formulations

The quest for sustainable alternatives extends to many areas of formulations. With the new digital service [SFA Formulator](#), BASF now presents a way to design liquid rinse-off formulations with innovative, sustainable and naturally derived SFA surfactants. SFA (Disodium 2-Sulfolaurate) is versatile and can be used in all types of personal care products (shampoo, shower gels, etc.) and formats (liquid and/or waterless). The performance of SFA is greatly enhanced by combinations with co-surfactants, especially CAPB (Cocamidopropyl Betaine) and/or APG (Alkylpolyglucoside), where it performs at its best. This tunable surfactant system, SFA/CAPB/APG, leads to a wide range of possibilities for formulations. The newly developed SFA Formulator is the perfect solution to shorten the time to market for the next generation of rinse-off products such as shampoos, shower gels and liquid soaps. SFA Formulator is a predictive modeling and optimization service. It was developed based on numerous experimental data collected in BASF's laboratories

for the SFA/CAPB/APG surfactant system. The service thus creates an approach to BASF's positioning that sustainability should not be a challenge but a motivation.

The easy-to-use digital self-service, which is integrated into D'lite, allows real time correlations between the composition of a formulation and its key properties based on the four easy-to-use ingredients Dehyton® SFA (Cocamidopropyl Betaine and Disodium 2-Sulfolaurate), Plantapon® SFA (Lauryl Glucoside and Disodium 2-Sulfolaurate), Dehyton® PK45 (Cocamidopropyl Betaine) and Plantacare® 1200 UP (Lauryl Glucoside). SFA Formulator easily, reliably, and quickly predicts key liquid formulation properties such as clarity, foaming capacity, viscosity, naturalness and cost indication.

New digital tool enables end-to-end traceability in argan oil supply chain

As part of its Responsibly Active program launched in 2022, BASF Personal Care has set itself ambitious sustainability goals for its botanical supply chains in its active ingredient portfolio. One of them is 100% traceability by 2030. With a pilot project for argan oil, the company is taking another important step toward achieving this goal: A [new digital tool](#) to help monitor local sourcing by collecting detailed batch tracking data on the harvesting of the fruit, the crushing of the nuts and the processing of the oil, thus ensuring full traceability. The organic argan supply chain has already met high standards in the past and is fair-trade certified. Now, the tool helps facilitate the certification process by providing easily accessible, reliable data on, for example, the contribution of income from argan activities to a fair living wage. It also benefits BASF's local partners, highlighting their operational excellence and supporting oil-processing cooperatives in their digital transformation.

“With six different cooperatives and more than 500 women involved in the fair-trade certified supply chain, argan sourcing is one of the most complex in our active ingredient business. Thanks to many years of trusted collaboration with our suppliers, we have now been able to implement this advanced digital tool to ensure the highest possible transparency. We are learning together to improve together,” said Marie Cecile Thibault, Purchasing Manager for Botanical Raw Materials, BASF Beauty Care Solutions France S.A.S.

In the near future, the data collected will also be made available in real time to BASF's customers involved in the argan supply chain to help them achieve their own sustainability goals. The argan oil supply chain, along with palm and castor oil,

will be featured as best practices for sustainable sourcing in BASF's Sustainability Pod at in-cosmetics.

These are but a few examples of how BASF's Care Chemicals Division is addressing future challenges. Sustainability, digitalization, innovation and new approaches to working together are the key cornerstones to [Care 360° – Solutions for Sustainable Life](#).

About the Care Chemicals division at BASF

The BASF division Care Chemicals offers a broad range of ingredients for personal care, home care, industrial & institutional cleaning, and technical applications. We are a leading global supplier for the cosmetics industry as well as the detergents and cleaners industry, and support our customers with innovative and sustainable products, solutions and concepts. The division's high-performance product portfolio includes surfactants, emulsifiers, polymers, emollients, chelating agents, cosmetic active ingredients and UV filters. We have production and development sites in all regions and are expanding our presence in emerging markets. Further information is available online at www.care-chemicals.basf.com.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 111,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio comprises six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €87.3 billion in 2022. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the United States. Further information at www.basf.com.