

News Release

P144/22e
February 17, 2022

BASF sets a new standard for efficient product development of sustainable cosmetics with the launch of Emollient Maestro

- **State-of-the-art digital product designer to identify optimal emollient mixes based on various parameters**
- **AI-empowered simulation enables faster, more targeted prototyping and efficient product development**
- **Sophisticated upgrade of the BASF Emollient Jockey**

Monheim am Rhein, Germany – February 17, 2022 – With the introduction of its [Emollient Maestro](#), BASF's Care Creations® is once again raising the bar for smart development of sustainable, high-performing personal care products. Thanks to artificial intelligence (AI) modelling, the digital service calculates ideal emollient mixes according to user briefings, and allows for the targeted replacement of industry benchmarks such as cyclopentasiloxane, dimethicone or mineral oils. "Inspired by our award-winning Emollient Jockey and the positive feedback from our customers, we decided to develop an even more powerful version of this digital service. Integrated into our D'Lite services, our Emollient Maestro supports our customers in significantly accelerating their formulation design and thus their time-to-market, while promoting the Clean Beauty movement for more eco-friendly, sustainable personal care products," said Christopher Neary, Marketing Manager New Business Development and Digitalization.

Advanced features for sustainable solutions

The Emollient Maestro is a comprehensive upgrade of the company's Emollient

Jockey that was introduced in 2020. This original version, which is still available, allows to compare the characteristics and performance of single emollients and thus to easily select the best-performing emollient for any given formulation.

In the new, extended edition, the simulation now includes complex emollient mixes. Depending on the users' needs, it takes into account sensory and physico-chemical properties, the naturality index in accordance with ISO 16128, and common ecolabel certifications such as COSMOS, NaTrue or the Nordic Ecolabel. To facilitate the development of even more sustainable solutions, the Emollient Maestro also draws on data of benchmark products. By setting attributes of ingredients like silicones or mineral oil derivatives as a performance target, such ingredients can be specifically replaced. These new features allow for faster prototyping and more efficient design of products with a positive sustainability footprint.

Sophisticated technology embedded in a comprehensive digital ecosystem

Based on systemically designed experiments and accurate prediction models, the AI-driven service delivers 5,000 binary combinations and 150,000 ternary combinations that theoretically match any given emollient. The new product designer is integrated into the BASF D'Lite ecosystem. This powerful digital platform seamlessly merges multiple real-time data sources such as consumer insights, trend and market data, and social media analytics with the latest BASF product portfolio, concepts and over 3,300 formulations. To use the Emollient Maestro optimally according to personal needs, both a self-service and a consulting model are available. Customers can reach out to their sales representative to discuss their individual use case.

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

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 110,000 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 is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €59 billion in 2020. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at www.basf.com.