

News Release

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BASF upgrades its Sunscreen Simulator with new features

- Latest generation offers additional and improved technical features based on new scientific data.
- Guided journey provides access to BASF's sun care formulation database with prototypes from global and regional labs.
- Integration into D'lite for enhanced formulation development.

Amsterdam, Netherlands – April 7, 2025 – BASF has updated its [Sunscreen Simulator](#), the company's digital lab for the development and optimization of sun care formulations. The new generation will be officially launched at this year's in-cosmetics Global, held from April 8 to 10 in Amsterdam.

Improved calculations

One of the main new technical features is the option to select different formulation types, including oil in water (O/W), water in oil (W/O) or oils, to explore the effect of the sunscreen formulation chassis on performance. "Considering the impact of the formulation type and its viscosity on the Sun Protection Factor is a significant step forward in obtaining a more accurate simulation and prediction of the SPF," said Dr Myriam Sohn, Principal Scientist at BASF's Global Technical Center Sun Care.

With this upgrade, customers have access to solubility calculations and evaluations. By connecting the filter system with specific emollients, they gain clear information on the dissolved percentage of each solid UV filter and can assess the interactions between these ingredients to streamline their formulation development.

Another feature enables formulators to gain insight into regulatory requirements. It assists them in identifying the right UV filters to meet specific market needs by providing SPF and UVA protection ratings for selected regions. Moreover, BASF's EcoSun Pass criterion provides information on the environmental compatibility of the chosen UV filter combinations.

“Get inspired” journey and improved project tracking

An additional novelty is the guided “Get inspired” journey that allows users to scroll through BASF's sun care formulation database and get access to internally tested prototypes from the company's global and regional labs. An enhanced user interface facilitates seamless navigation through the tool functionalities. The sorting function with various filtering options, including regions, project status or keywords, allows users to keep track and easily search for specific projects.

Seamless integration into D'lite

The Sunscreen Simulator has established itself as an industry benchmark that can be used to start new sunscreen developments. It has benefited from continuous improvements over the past 25 years to increase the accuracy of prediction. With its integration into [D'lite](#), BASF's digital knowledge service platform for the personal care industry, users can leverage the BASF ecosystem to increase efficiency and innovation throughout the formulation development process. User can now explore the sun care market and review consumer products. This allows for a more comprehensive understanding of product offerings and market trends. The Sunscreen Simulator will be accessible for all registered D'lite users.

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. Our ambition: We want to be the preferred chemical company to enable our customers' green transformation. We combine economic success with environmental protection and social responsibility. Around 112,000 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, as core businesses, the segments Chemicals, Materials, Industrial Solutions, and Nutrition & Care; our standalone businesses are bundled in the segments Surface Technologies and Agricultural Solutions. BASF generated sales of €65.3 billion in 2024. 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.