

News Release

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BASF showcases new dermocosmetic active ingredient Castaline® for atopic-prone skin at Cosmet'Agora 2022

- **Clinically proven to support the skin barrier and comfort atopic-prone skin**
- **100 percent natural origin: valorization of French chestnut leaves respecting organic cultivation**
- **Innovative 3D model used to mimick mild-to-moderate atopic dermatitis**

Paris, France – January 11, 2022 – At Cosmet'Agora 2022, BASF is introducing [Castaline®](#), a new active ingredient for cosmetics that is clinically proven to help improve the appearance of skin prone to atopy. Castaline is a 100 percent natural, organic solution that is derived from French chestnut leaves, and is the most recent addition to BASF's growing portfolio of ingredients for personal care products that help improve the skin condition related to common epidermal concerns.

Hydrates and soothes: Castaline® helps comfort atopic-prone skin

Dermocosmetics reflect rising awareness of how personal care products can positively support skin health. Castaline is BASF's latest innovation in this field. *In vivo* trials have proven that it provides a protective effect and thus helps comfort skin prone to atopy. This common skin issue is characterized by a vicious cycle between immunological abnormalities that break down barrier functions, causing itchiness, redness, and often leading to a loss of confidence as well as a microbial dysbiosis due to a prevalence of *S. aureus*.

In a double-blind, randomized *in vivo* study conducted under dermatological control, 22 female and male adults with dry skin and a mild-to-moderate EASI score (Eczema Area and Severity Index) applied a base cream emulsion inspired by an established market reference product for very dry skin on one arm or hand, and the same emulsion containing 2 percent Castaline on the other arm or hand. After 56 days, the product containing 2 percent Castaline delivered a 27 percent decrease in Transepidermal Water Loss (TEWL) compared to 18 percent when using the base cream alone, the difference being significant versus the reference product. Additionally, the average EASI score decreased by 43 percent using Castaline.

These results show that Castaline helps support the skin's barrier function – with visible and tangible effects: in a self-assessment conducted at the end of the 56-day study, 82 percent of participants stated that their skin looked more hydrated, and 73 percent said Castaline increased softness and achieved a soothing effect.

Innovative 3D model mimicking skin prone to moderate atopy

For *in vitro* testing, researchers at BASF developed an innovative 3D model of inflamed epidermis in the presence of *S. aureus*, the prevalent bacteria in skin prone to atopic conditions, and in the presence of a specific inflammatory cocktail of cytokines identified in the acute phase of this skin condition. Studies on this model have confirmed that Castaline helps support the skin's natural immune, microbial, and physical barriers. The *in vitro* and *in vivo* results combine to demonstrate that this new ingredient soothes and protects atopic-prone skin.

By-product valorization of French chestnuts

Castaline is an extract of organic certified leaves of chestnut trees (*Castanea sativa*), manually harvested in France. Since the leaves are carefully collected from young trees that do not bear fruit, their use in a cosmetic active ingredient can be considered as valorization of an agricultural by-product. Their harvest has no impact on the preservation of the species and creates a new value stream in chestnut production. As a result, Castaline is suitable for cosmetics that are marketed as sustainable and natural. With chestnut leaves being known from literature for their health properties in medicinal and Ayurveda uses, Castaline is the perfect ingredient to provide consumers with a mild and complementary solution for very dry or atopic-prone skin.

An expanding portfolio of dermocosmetic natural ingredients with proven efficacy

The new, active ingredient Castaline is a perfect fit for BASF's portfolio of dermocosmetic and natural ingredients that offer skin challenge solutions. This includes Bix'Activ® for oily skin, Hydrasensyl® Glucan Green for dehydrated skin, Inolixir® for sensitive skin, Nephoria® and PeptAlde® 4.0 for aged skin, and Relipidium® for dry skin.

Together, these effective, high-quality ingredients are empowering cosmetics manufacturers to meet rising demand for clinically proven dermocosmetic products that support healthier and more comfortable skin. For consumers, this opens up possibilities to relieve discomfort – and boost skin confidence.

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 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.