

News Release

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Scalposine™: new detox ritual promotes a healthy scalp and microbial diversity

- **BASF's new active ingredient Scalposine™ reduces sebum production and encourages beneficial strains of bacteria**
- **The amino acid derivative prevents oily scalp and reduces itching after one month of application**
- ***In vivo* and *in vitro* tests confirm instant and long-lasting efficacy**

Duesseldorf-Holthausen, Germany – April 15, 2020 – Today's hectic lifestyle as well as environmental influences such as dust and pollution negatively modify the physiological parameters of the scalp, making hair and scalp concerns more prevalent around the world. An unhealthy scalp is often oily, covered with dandruff and can become sensitive. In response, BASF has created Scalposine™ – a true scalp detox that can restore beauty and health. The new active ingredient is proven to soothe and purify the scalp by decreasing the production of sebum and replenishing scalp microbiota.

Resetting the microbiome for a healthy scalp

Virtually unexplored until now, the scalp supports several types of micro-organisms living in harmony with our scalp cells. In a metagenomic study, BASF explored the disruptive influence of sebum on this fragile microbiotic balance. The analysis confirmed that the diversity of the microbiota is lower on an oily scalp than on a normal scalp. Scalposine at 1 percent significantly increased the diversity of the scalp's microbiota after one month of application – with the number of taxa

increasing by 36 percent as compared to the placebo. What's more, the active ingredient exhibited a prebiotic effect in that it boosted recolonization with six strains of bacteria previously identified by BASF researchers as being beneficial for a healthy scalp overall.

Reducing sebum production for a purified scalp

Excessive sebum production in hair follicles not only fosters the reduction of beneficial bacteria strains but irritates the scalp, causes skin flaking and hair to appear greasy. *In vitro* trials showed that Scalposine at a dose of 0.7 percent effectively reduces the gene expression of 5 α -reductase 1, the enzyme initiating the process of sebum production, by as much as 77 percent. A one-month placebo-controlled clinical study confirmed the active ingredient's ability to lower the level of scalp sebum. Furthermore, 82 percent of study participants reported an immediate soothing effect on the scalp, while some even saw flakiness decrease after 28 days of application.

With Scalposine (INCI: Glycerin (and) Water (and) Sarcosine), BASF has developed a holistic approach based on Sarcosine, an amino acid derivative found naturally in the human body. It is a precursor of glycine, an amino acid essential for building major skin macromolecules such as elastin and collagen.

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 117,000 employees in the BASF Group work on contributing 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 2019. 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.