

News Release

P114/19e
January 15, 2019

BASF's new active ingredients target skin conditions' root causes

- **Blue light protection inspired by plant defense strategies**
- **New active ingredients coming from the research of BASF's innovation platforms on epigenetics, microbiome and extraction**

Paris, France – January 15, 2019 – Every day, our skin is exposed to harmful environmental influences and the negative effects of our fast-paced lifestyles. Oily skin, pigment spots, fine lines and wrinkles, or dry skin with itching and tingling sensations are common consequences. During Cosmet'Agora from January 15 to 16 in Paris, [BASF's Care Creations™](#) will present several new active ingredients that were derived from the research activities of the company's innovation platforms on epigenetics, microbiome and extraction, addressing the dermatological roots of these skin conditions and helping manufacturers meet end-consumers' needs.

Blue light protection inspired by plant defense strategies

Skin aging is driven by several external factors and especially by light. Blue light radiating from our cell phones and computers, but mainly from the sun, deeply penetrates the skin and can create damages in the dermis and even in the DNA. Besides the approach to scatter blue light by particulate UV filters (i.e. Tinosorb® M), BASF developed three unique leaf extracts, inspired by plant defense strategies, to offer a complete protection against multiple sources of light, especially blue light.

Ciste'M®, a rockrose extract adapted to arid climate, protects the DNA of skin cells from the effects of UVB exposure and prevents the deleterious effects of blue light.

DN-Age®, a candle bush leaf extract, promotes the cell's youth during sun exposure.

It offers a comprehensive cellular DNA protection against UVA, UVB and blue light and helps to promote the skin's natural DNA repair process. **Arganyl**[®], an extract of argan leaves, protects DNA against blue light in two ways (DNA anti-oxidation and breakage) and has anti-pollution efficacy e.g. against particulate matter.

Bix'Activ[®] – for pure and mattified skin

Oily skin is a concern for consumers around the world: hyperactive glands produce excess sebum, which causes shiny skin, enlarged pores or imperfections. BASF's new active ingredient **Bix'Activ**[®] – an extract from *Bixa Orellana* seeds – reduces sebum production by restraining the proliferation of sebocytes in sebaceous glands. In addition, it blocks the signal that induces hyper-keratinization and helps to refine pores as a result. Because it also keeps microbiome virulence at bay, the agent helps in reducing skin blemishes. A placebo-controlled clinical study demonstrated extraordinary results: The number of active sebaceous glands decreased by more than 50 percent, and the follicular sebum excretion rate fell by more than 70 percent. Bix'Activ is COSMOS and ECOCERT-approved and suitable for NATRUE-certified formulations.

DN-Aura[®] – for even skin, free of pigment spots

Pigment spots is the most visible sign of photoaging and have been proven to worsen with increasing air pollution. They are particularly prevalent in Asian women. By acting on an epigenetic level and targeting the expression of tyrosinase, **DN-Aura**[®] decreases melanin synthesis in melanocytes, reducing the incidence of dark spots. In an *in-vivo* study among Asian women aged between 18 and 60, the active ingredient significantly reduced both the melanin content in melanocytes and the pigment spots. An extract derived from the leaf of the Vietnamese Langsat tree, the 100-percent natural-based active conforms to ECOCERT and COSMOS standards.

Neurobiox[®] – for flawless skin

In response to consumers' quest for more radiant skin and products that blur skin imperfections, BASF experts have developed **Neurobiox**[®]. Derived from *Achillea millefolium*, the 100-percent natural-based active stimulates cell renewal and increases the thickness of the epidermis, which decreases with age. Neurobiox restores cell communication by stimulation of the skin's neuroreceptors. In a placebo-controlled clinical study, it produced extraordinary effects – clearly improving both skin clarity and radiance and leading to a decreased pore

appearance. As Neurobiox also has a positive effect on the skin's luminosity, it can be used in any global anti-aging products.

Phytosoothe® – for a healthy physical and microbiotic skin barrier

With lifestyle-related skin conditions and allergies becoming more prevalent, a balanced skin microbiome is increasingly vital for protecting the epidermis. **Phytosoothe®** protects the physical and microbiotic skin barrier and restores it after impairment. The biomimetic active is especially suitable for formulations developed for sensitive skin or babies. In hair care applications, it soothes irritated scalps and significantly reduces the intensity of itching and tingling after just one use. As a blend of phytosterols from rapeseed and cetearyl alcohol, Phytosoothe is free from preservatives, has a low melting point and an excellent safety profile.

About the Care Chemicals division at BASF

The BASF division Care Chemicals offers a broad range of ingredients for personal care, hygiene, home care, industrial & institutional cleaning, and technical applications. We are the 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. Superabsorbent polymers developed for the full spectrum of hygiene applications complete the range. 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. The more than 115,000 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 more than €60 billion in 2017. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com.