

# Alcimed

## Blue light: a new target for the cosmetics industry

Paris, September 18<sup>th</sup> 2018.

*Considered as an effective treatment against acne or premature skin ageing, blue light is subject to debate and is now the new priority of the cosmetics industry. From benefits to negative effects on our skin, Alcimed, an innovation consulting company, reviews the usage of blue light in cosmetic skin care products.*

### **An increasing exposure**

Blue light, also known as HEV (High Visible Energy), is a color in the spectrum of visible light that can be perceived by the human eye and whose wavelength is between 380 and 500nm. Although sunlight is its main source, new artificial sources are invading our daily environment: LED light bulbs, fluorescent lights, flat-screen televisions, computers, tablets and smartphones. This exposure is all the more evident as we now spend -on average- six hours a day in front of a screen.

### **From medical equipment to home beauty devices**

Blue light medical devices are commonly used in medical offices and dermatology departments to treat jaundice in newborns but also -by eliminating the bacteria causing it- acne, certain dental and gum diseases, and gastritis. In addition, blue light is also known to regulate the circadian cycle and is therefore used to fight sleep disorders, fatigue, depression, dementia and even drowsiness.

While for a long time blue light was the prerogative of medical offices, light therapy has become popular within the general population due to the development of products for home-use, the famous "*home-devices*". Examples include Neutrogena's acne light therapy mask launched in 2016 and Espada – a device fighting skin imperfections caused by acne from the Swedish electro-beauty brand Foreo, launched in 2017.

### **The "dark" side of blue light**

Retinal phototoxicity of blue light emitted by our screens is well known, but its direct biological impact on skin is not yet well understood and is the subject of numerous research projects. Among the reference works, the collaboration between the companies Gattefossé and Cytoo made it possible to achieve initial results, which were unveiled at the 2017 IFSCC conference in Seoul, highlighting a direct impact of blue light on the mitochondrial network of cutaneous fibroblasts. Both a fragmentation of this network and a lower production of mitochondrial ATP - responsible for producing the energy necessary to cellular biological functions - were highlighted. Other studies have shown that blue light produces oxidative stress in the skin, promotes the appearance of pigment spots and accelerates the ageing process by inducing molecular damage to skin proteins.

### **A real boom in anti-blue light skincare products**

Aware of the challenges associated with blue light, cosmetic brands are increasingly offering beauty products for preventive purposes. The development of this new generation of cosmetic products was initiated in 2016 with the launch of an anti-blue light mist by Garancia; it then experienced a real boom following the launch of a full

dedicated range of products, "Age Protect" by Uriage. At the same time, other products have appeared on the market, such as the Patyka products and Anne Marie Börlind's facial oil.

Cosmetics SMEs are not the only companies positioning themselves in this segment. Doctors have created cosmetic brands -such as Murad and Dr. Sebagh, also focusing on anti-blue light products. Finally, large groups such as Lancôme and its beauty shield UV Expert XL Shield CC Cover are starting to enter the field, ever so timidly.

In terms of active ingredients, suppliers are not far behind. For example, Lipo Chemicals has developed the patent-pending ingredient Liposhield HEV Melanin, while Greentech is already offering Soliberine. Other examples include Clariant (B-Circadin), Exsymol (Redivine) and Expanscience (Alpha-lupaline).

*"Marketing buzz or sustainable claim? For the time being, the range of anti-blue light products is expanding daily, and as long as consumer lifestyle continues to increase their exposure to blue light, their expectations for effective solutions will keep on increasing."* – concludes Vincent Pessey, Project Manager at Alcimed's Chemistry Business Unit.

**ABOUT ALCIMED** - [www.alcimed.com](http://www.alcimed.com)

Created in 1993, ALCIMED is a consulting company specializing in innovation and the development of new markets, specializing in life sciences (health, biotech, agri-food), chemistry, materials and energy as well as in aeronautics, space, defense and public policies. It works with major industrial groups, ETIs and SMEs, investment funds and institutional players. Thanks to its 200 high-level employees, ALCIMED supports its clients in the exploration and development of their unknown lands: new technologies, new offers, new geographies, possible futures, new ways of innovating. The company, which has its headquarters in Paris, is present in Lyon and Toulouse, as well as in Germany, Belgium, Switzerland, the United States and Singapore. Alcimed is a member of CroissancePlus and the ACI (Association des Conseils en Innovation).

**Press contacts:**

Marie-Caroline Saro | [mcsaro@comcorp.fr](mailto:mcsaro@comcorp.fr) | +33 1 58 18 32 58 | +33 6 88 84 84 81 74

Muriel Martin | [mmartin@comcorp.fr](mailto:mmartin@comcorp.fr) | +33 1 58 18 32 54 | +33 6 70 45 45 66 46