















# IceAwake™ Fighting aging in sleep-deprived skin

# Extract from a Glacier Bacterium to Wake up Sleep-Deprived Skin Cells

IceAwake<sup>™</sup> is based on an extract of the bacteria *lodobacter ssp.*, which was isolated from the soil below a Swiss glacier. IceAwake<sup>™</sup> rejuvenates skin that appears aged due to a hectic lifestyle that also features too little sleep.

Sleep deprivation not only leads to a tired appearance in the short-term, but it is also an aging factor in the long-term. This is due to inefficient protein folding in sleep-deprived and aged skin. Unfolded proteins are unable to carry out their job and accumulate. This leads to stress in the endoplasmic reticulum (ER), the cellular organelle responsible for secreted protein production, and subsequently to cell damage. In addition, ATP, the energy molecule that is needed for protein folding and many other cellular processes, is reduced in sleep-deprived cells.

# IceAwake™ was shown to:

- increase the expression of chaperones in aged fibroblasts that assist in proper protein folding
- increase ATP production and reduce ER stress in a sleep deprivation cell model.

In clinical studies on Asian as well as Caucasian female and male volunteers, IceAwake $^{\text{\tiny M}}$  visibly rejuvenated their appearance by decreasing wrinkle depth, increasing radiance, and reducing the tired appearance for a refreshed look.

IceAwake™ is COSMOS approved\* and NATRUE approved.

## IceAwake™

- Energizes tired skin
- Reduces wrinkles after only two weeks
- Increases radiance despite a hectic lifestyle

## **Applications**

- Energizing serums for fatigued skin
- Concentrates for glowing, revitalized skin
- Radiance enhancing face masks
- Anti-aging treatments

## Formulating with IceAwake™

- Recommended use level: 1-2%
- Incorporation: For cold processes, dissolve IceAwake<sup>™</sup> into the aqueous phase or add it pre-dissolved into a small amount of water after emulsification. For hot/cold processes, add IceAwake<sup>™</sup> pre-dissolved in a small amount of water, during the cooling phase below 40°C.
- Thermostability: Temperatures of up to 40°C for a short time will not affect the stability of IceAwake™.

#### INCI (EU/PCPC) Declaration

Succinic Acid (and) Maltodextrin (and) Aqua/Water

# Additional Information

- Without preservation
- Without alcohol



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## **Marketing Benefits**



- 2<sup>nd</sup> Prize at the BSB Innovation Award in the category Cosmetics – Raw Materials – Actives
- Based on a unique extremophile bacterium found under a Swiss glacier
- Sustainable sourcing of raw material (biotechnology)
- Novel aging mechanism based on protein folding and chaperone activity
- Without preservatives
- COSMOS approved
- NATRUE approved



## Innovating for your success

Mibelle Biochemistry designs and develops innovative, high-quality actives based on naturally derived compounds and profound scientific know-how. Inspired by nature – Realized by science.

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