

# SPIRULYSAT®

An antioxidant- and vitamin-boosted  
spirulina revolution for cosmetic use  
that you have never encountered before



abt

AQUA BIO TECHNOLOGY ASA



# Agenda

- Aqua Bio Technology ASA
- Microalgae
- Spirulina
- Phycocyanin
- SPIRULYSAT®

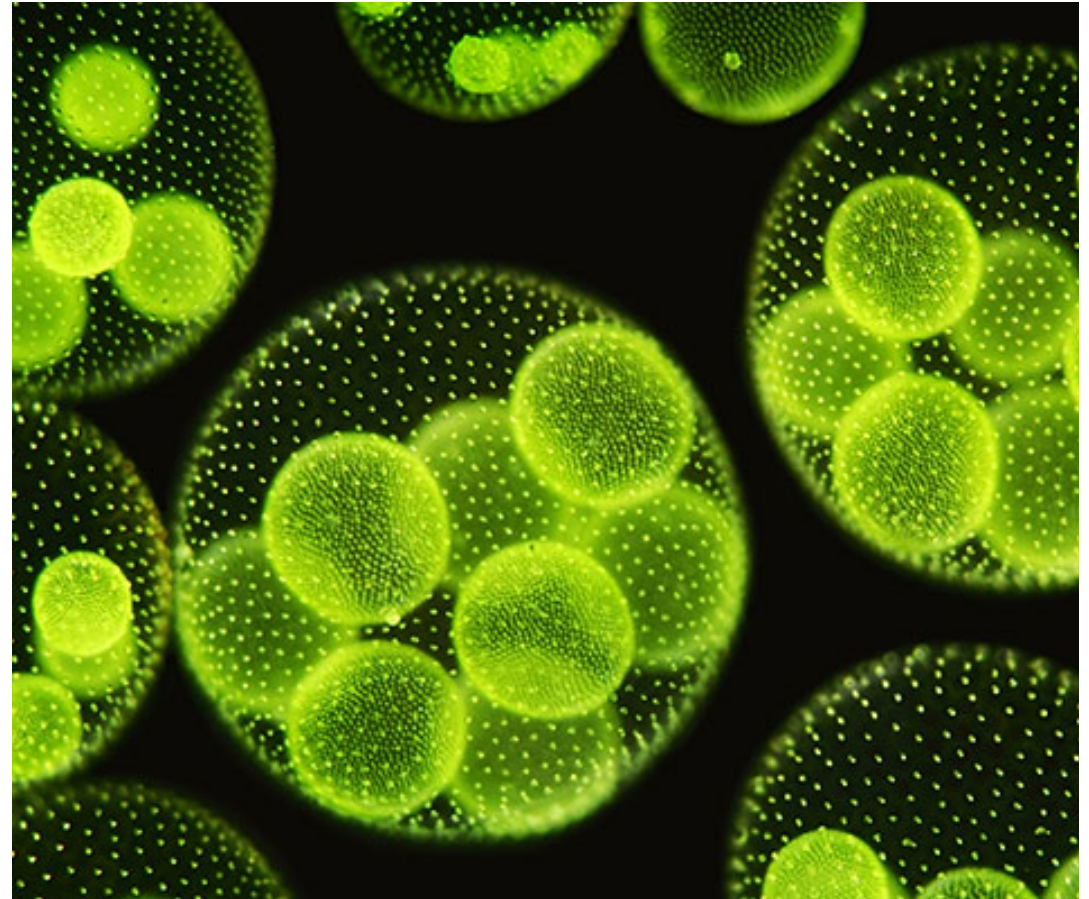
# Aqua Bio Technology ASA (ABT)

- Founded in 2000
- Listed on Oslo Stock Exchange (Axess) January 2008
- Develops, manufactures and markets patented and natural active ingredients to the global personal care industry
- Commercializes third-party cosmetic brands secured via in-licensing/exclusivity agreements
- Extensive research and development capabilities in-house & in cooperation with leading R&D organizations
- ABT is actively working with several third-party companies to in-license cosmetic ingredients and brands



# Microalgae

- Microalgae are ancestral microscopic organisms originating more than one billion years ago
- Present in fresh, sea and brackish water
- Microalgae need water, nutrients and carbon dioxide in order to supply the natural photosynthesis process
- Provides about 50% of the oxygen humans breathe
- Other uses: human and animal nutrition, cosmetics, pharmaceuticals, biofuel etc
- Only about 40 out of 1 million species utilized commercially today



# Spirulina

- Made from a blue-green algae
- Considered a superfood
  - Known to have an abundant content of protein
  - Excellent source of various vitamins and minerals
- Main forms of commercially available spirulina is powder and tablets
- Mainly used in dietary supplements / nutritional products
- Has a particular smell and taste
- With the lack of uniqueness and patent protection, Spirulina has become a commodity with a low price point with many suppliers globally



# Phycocyanin

- Phycocyanin is a pigment-protein complex from the light-harvesting phycobiliprotein family
- Works as an accessory pigment to chlorophyll
- Water-soluble
- Have been shown to have potent antioxidant and anti-inflammatory benefits
- Main forms of commercially available spirulina is powder and tablets
- Mainly used in dietary supplements / nutritional products
- With the lack of uniqueness and patent protection, Spirulina has become a commodity with a low price point with many suppliers globally



# Spirulysat<sup>®</sup>

- A novel and unique antioxidant- and vitamin-boosted spirulina revolution for cosmetic use
- Combines the unique effects of commodities like spirulina and phycocyanin into a state-of-the art cosmetic ingredient
- Is provided as an aqueous form in order to provide ease of use for cosmetic formulators
- Odor/smell eliminated
- A perfect blue color
- 100% natural
- This unique combination is truly second to none and gives manufacturers and brand owners a potent and effective cosmetic ingredient



# Spirulysat<sup>®</sup> - Benefits

- At only 1% concentration:
  - **provides a moisturizing effect:** significant increase in the cutaneous hydration rate
  - **provides a redensifying effect:** significant decrease in the non-echogenic surface
- At 3% concentration:
  - **provides a significant smoothing effect of the skin**
  - **provides a significant anti-wrinkle effect**
  - **provides a moisturizing effect:** significant increase in the cutaneous hydration rate
  - **provides a redensifying effect:** significant decrease in the non-echogenic surface
- Non-irritating,
- Non-sensitizing,
- Non-cytotoxic to human keratinocytes,
- Non-mutagenic and non-promutagenic.



# Formulating with Spirulysat<sup>®</sup>

- INCI name: Plankton extract (and) Malic acid (and) Cinnamomum Camphora
- Easy to formulate: aqueous, odorless
- Non tacky, does not impact the aesthetics or stability of a formula
- Active in a broad and skin-friendly pH range
- Suitable for a wide range of cosmetics applications, even for sensitive skin
- Recommended levels: 1% and 3%
- Storage conditions: refrigerated for best shelf life; below 30°C



# Summary

- A novel and unique antioxidant- and vitamin-boosted spirulina revolution for cosmetic use
- A state of the art combination of otherwise commodity ingredients
- Documented benefits: moisturizing, anti-wrinkle, smoothing effect and redensifying effect
- 100% natural and biodegradable: designed by nature and derived from a sustainable source
- Safe and non-toxic: extensive testing by independent laboratories
- Ease of formulation: aqueous, odourless and active in a broad pH range
- Suitable for a wide range of cosmetics applications, even for sensitive skin



For more information

[info@aquabiotech.no](mailto:info@aquabiotech.no)

[www.aquabiotechnology.com](http://www.aquabiotechnology.com)