3. Infused Butter

PHYKODIS ReAct
From Sensitive to Atopic-prone Skin

PHYKODIS ReAct x ATOPIC-PRONE SKIN

Arthrospira platensis is a blue-green microalga commonly known as **spirulin**, valued for its high content in **Phycocyanin**, a natural blue pigment and protein complex known for its antioxidant and **anti-inflammatory** properties. **Reduces itching and redness**, promotes skin hydration, elasticity, and protects against environmental stressors like UV radiation. Used as a natural colorant and bioactive to enhance skin protection and combat oxidative stress.

TECHNICAL INFORMATION

INCI name: Arthrospira platensis Extract, Butyrospermum Parkii Butter, Lecithin, Trehalose.
Recommended use concentration: 0,5-2%.
Preservatives: Sodium Citrate.
N.O.I.: 100%
Appearance: Blue butter.
Solubility: Soluble in oil.

IN VIVO STUDY

Objective: evaluate the efficacy reducing symptoms of **atopic prone skin**.
Volunteers: 20 volunteers with **with atopic-prone skin and mild to moderate outbreaks**.
Study duration: 56 days.
Application: Apply a cream containing **2% of PHYKODIS ReAct** to the outbreaks once a day.

RESULTS

Evaluation of Anti-Erythema and Redness efficacy
- After 28 days, there is a decrease on average of erythema with a maximum improvement of **28.31%**.
- After 56 days, there is a decrease on average of erythema with an improvement of **42.38%**.

Evaluation of Roughness
- After 28 days, there is an increase of **51.08%**.
- After 56 days, there is an increase of **28.57%**, so the **roughness improves**.

Evaluation of Smoothness
- After 28 days, there is a decrease **-58.92%**.
- After 56 days, there is significant decrease **-60.17%**, so **desquamation improves**.

Evaluation of itching
- After 28 days, there is a statistically significant decrease **-47.08%** on itching improvement.
- After 56 days, there is a statistically significant decrease **-71.79%** on itching, so **pruritus improves**.

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LIFE BEAUTY PRODUCTS

PHYKODIS
Algae Actives for Life

PhykoDis backed by science and inspired by nature. Where sustainability meets superior skincare, setting a new standard in beauty innovation.

As an umbrella brand, it encompasses a range of skincare actives derived from **microalgae**. Building on our commitment to nature's most powerful resources, we expand our offerings with a wide array of actives, extracts, liposomal technologies, and butters each carefully selected to deliver exceptional skincare results.

About Microalgae

Microalgae, the cornerstone of PhykoDis, are unicellular powerhouses. Through photosynthesis, they harness CO2 and light to produce organic biomass while releasing oxygen.

As the foundational organisms in the food chain, microalgae are incredibly diverse. Their vast number of species and adaptability make them highly valuable across various industrial sectors.

Conscius Beauty with a Purpose, Creating a Sustainable Future

Furthermore, all Phykodis microalgae are distinguished by their commitment to sustainable agriculture. They thrive in all types of water, demonstrate high productivity, provide an abundance of nutrients, and capture CO2, converting it into oxygen. As a result, they form the planet's most efficient ecosystem while simultaneously contributing to more sustainable production practices.

Skin Diver Technology

Enhances the efficacy of our formulations by encapsulating actives in liposomes for deep penetration and enhance its stability and efficacy.

Let's discover PhykoDis Algae Actives:

1. **Skin Diver Technology**
   - **PhykoDis FucoFit:** Anti-cellulite Algae for Life
   - **PhykoDis Antiox:** Antioxidant Algae for Life
   - **PhykoDis WellAgeing:** Algae for Timeless Beauty
2. **Hydroglycerinate Extract**
   - **PhykoDis GlassSkin:** Instant Brightening Alage effect
3. **Infused Butter**
   - **PhykoDis ReAct:** From Sensitive to atopic-prone skin

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1. Skin Diver Technology

PHYKODIS FucoFit Anti-cellulite Algae for Life

PHYKODIS FucoFit x ANTI-CELLULITE

Phaeodactylum tricornutum is a marine diatom microalga, rich in bioactive compounds, especially carotenoids like **fucoxanthin**, a natural pigment, omega-3 fatty acids (EPA), and phytosterols, a unique composition in the plant kingdom to **reduce cellulite**.

TECHNICAL INFORMATION

INCI name: Phaeodactylum tricornutum extract, Aqua, Glycerin, Ethanol, Lecithin, Xanthan Gum, Tocopherol.
Recommended use concentration: 0,5-2%.
Preservatives: Sodium Levulinate, Sodium Anisate.
N.O.I.: 100%
Appearance: Dark brown liquid..
Solubility: Dispersable in water, soluble in water et pH>7.

IN VIVO STUDY

Objective: to determine **anti-cellulite** and **slimming** efficacy.
Volunteers: 20 volunteers with **with medium grade cellulite**.
Study duration: 56 days.
Application: Apply a cream containing 2% of **PHYKODIS FucoFit** twice a day.

RESULTS

Evaluation of firming efficacy
- After 28 days, there is a decrease **-4.02%**.
- After 56 days, there is a decrease **-4.94%** on average when compared to T0, so **firmness improves**.

Evaluation of elasticity improvement
- After 28 days, there is a statistically significant decrease **-33.33%**.
- After 56 days, there is a statistically significant decrease **-38.46%**, so **elasticity improves**.

Assessment of the degree of cellulite
- After 56 days, there is a statistically significant decrease **-25.24%**, so **cellulite is improved**.

PHYKODIS Antiox Antioxidant Algae for Life

PHYKODIS Antiox x SUN DAMAGE REPAIR

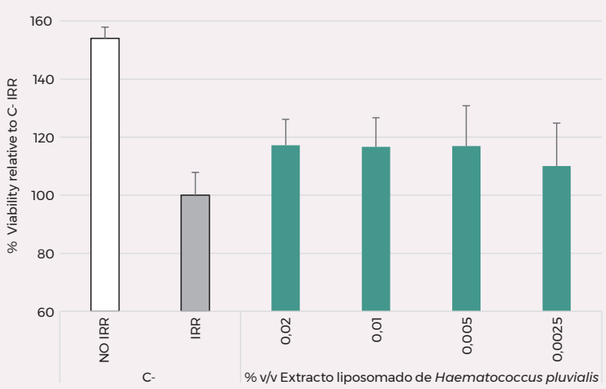
Haematococcus pluvialis is a freshwater microalga known for its ability to produce **astaxanthin**, a potent antioxidant that has various health and cosmetic benefits. Astaxanthin, produced by Haematococcus pluvialis, is renowned for its powerful **anti-inflammatory** and **antioxidant properties**. It reduces **signs of aging, protects against UV damage**, and enhances skin elasticity.

TECHNICAL INFORMATION

INCI name: Aqua, Glycerin, Ethanol, Haematococcus pluvialis extract, Lecithin, Xanthan Gum, Tocopherol.
Recommended use concentration: 0,5-2%.
Preservatives: Sodium Levulinate, Sodium Anisate.
N.O.I.: 100%
Appearance: Dark red liquid.
Solubility: Soluble in water.

IN VIVO STUDY

Objective: to determine the **solar damage repair** activity in HaCaT cell line. The assay TEAC (Trolox Equivalent Antioxidant Capacity) measures the capacity of **antioxidant substances** to reduce the cation ABTS+cation at comparison with the analogue hydrophilic of vitamin E.



Percentage of cell viability after irradiation and posterior cell treatment with different concentrations of the test compound, measured by MTT in HaCaT cell line. Bars represent the average of four technical replicates and error bars correspond to the standard deviation. negative control (C-) NO IRR: not irradiated cells, not treated with any product. Negative control (C-) IRR: irradiated cells, not treated with any product.

RESULTS

Solar damage repair activity
- Shows **solar damage repair activity** mainly at the three upper concentrations tested (0.02-0.005%), reaching cell viability values **16-17%** higher than the negative control (C- IRR). Solar damage repair activity diminishes to a 10% cell viability over the negative control at the lower concentration tested (0.0025%).

PHYKODIS WellAgeing x ANTIAGEING

PHYKODIS WellAgeing Algae for Timeless Beauty

Dunaliella salina is a microalga rich in **beta-carotene**, a potent antioxidant and precursor to vitamin A, which helps protect the skin from aging caused by free radicals. It also contains essential minerals like magnesium, potassium, calcium, and iodine, promoting skin hydration and cell repair. This microalga **reduces fine lines, wrinkles, and dark spots**, helping maintain **youthful skin**.

TECHNICAL INFORMATION

INCI name: Aqua, Glycerin, Ethanol, Dunaliella salina extract, Lecithin, Xanthan Gum, Tocopherol.
Recommended use concentration: 0,5-2%.
Preservatives: Sodium Levulinate, Sodium Anisate.
N.O.I.: 100%
Appearance: Dark yellow liquid.
Solubility: Soluble in water.

IN VIVO STUDY

Objective: to determine **anti-wrinkle**, **elasticity** and **firming** activity.
Volunteers: 20 volunteers, all skin types **with wrinkles and spots**.
Study duration: 56 days.
Application: Apply a cream containing **2% of PHYKODIS WellAgeing** once a day.

RESULTS

Evaluation of wrinkle improvement in the glabellar area
- After 56 days, there is an average decrease **-6.90%**, indicating improvement in the glabellar wrinkles.

Evaluation of wrinkle improvement in crow's feet
- After 56 days, there is an average decrease **-3.03%**, indicating improvement in crow's feet wrinkles.

Evaluation of firming efficacy on the cheekbone
- After 28 days, there is an average decrease **-15.95%**, indicating improved firmness. 64.71% of the volunteers showed improvements, with a maximum improvement of 46.78%.

Evaluation of elasticity efficacy on the cheekbone
- After 56 days, there is an average increase **8.66%**, indicating improvement in elasticity.64.71% of the volunteers showed improvements, with a maximum improvement of 98.07%.

Evaluation of fatigue reduction efficacy on the cheekbone
- After 28 days, there is an average decrease **-20.37%**, indicating reduced fatigue.70.59% of the volunteers showed improvements, with a maximum improvement of 80%.

Evaluation of anti-wrinkle efficacy (decrease in the number of wrinkles)
- After 28 days, there is an average decrease **-22.53%**, indicating improvement in wrinkles.72.22% of the volunteers showed improvements, with a maximum improvement of 77.97%.

2. Hydroglycerinate Extract

PHYKODIS GlassSkin x BRIGHTENING

PHYKODIS GlassSkin Instant Brightening Alage Effect

Chlorella vulgaris is a unicellular green microalga known for its rich nutritional profile, contains bioactive compounds such as chlorophyll, carotenoids, vitamins, amino acids, and minerals and it is rich in **antioxidants and anti-inflammatory agents** that **can influence melanin production**. By inhibiting tyrosinase, a key enzyme in melanin biosynthesis, and reducing oxidative stress, *Chlorella vulgaris* can help to **lighten hyperpigmentation, even out skin tone**, and provide a **brightening effect**.

TECHNICAL INFORMATION

INCI name: Aqua (and) Glycerin (and) Chlorella vulgaris extract.
Recommended use concentration: 0,5-2%.
Preservatives: Zinc Sulfate.
N.O.I.: 100%
Appearance: Dark green liquid.
Solubility: Soluble in water.

IN VIVO STUDY

Objective: to determine the ability to reduce **pigmentation**, enhance **skin radiance**, and promote a **brighter**, more **even skin tone**.
Volunteers: 40 volunteers with **with dark spots**.
Study duration: 56 days.
Application: Apply a cream containing **2% of PHYKODIS GlassSkin** once a day.

RESULTS

Evaluation of brightening efficacy on Dark Spot
- After 56 days, there is a decrease **-2,31%** on average of melanin content and when compared to Placebo the average of reduction is -69,4%.

Evaluation of brightening efficacy on Cheek
- After 28 days, there is a decrease **-8,4%** on average of melanin content and when compared to Placebo the average of reduction is -80,6%.

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