BLUE INGENUITY

BY GELYMA

ADVANCED ACTIVES

WHERE ADVANCED
SKIN SCIENCE MEET
INNOVATIVE PHYCOLOGY

ACTIVES PORTFOLIO



Gelyma

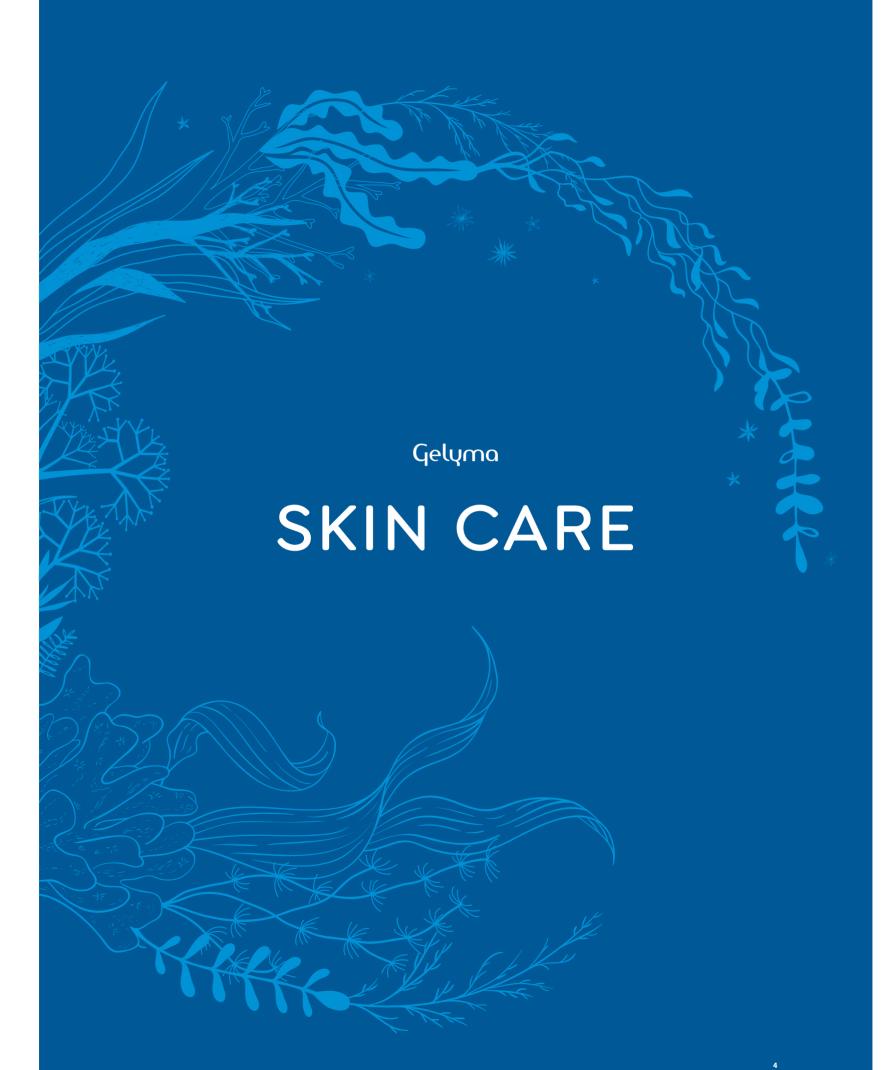
BLUE INGENUITY

ADVANCED ACTIVES FROM INVENTIVE PHYCOLOGY

Gélyma laboratories are born from the science of algae and the will to advance the development of natural solutions for personal care. Drawing from the algal biodiversity and novel approaches to skin physiology, Gélyma invites you to explore the new maps of beauty where skin cells reconnect to their deeper nature.

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TO REDUCE THE APPEARANCE OF FINE LINES & WRINKLES AND IMPROVE FIRMNESS

ACTISEANE®

DESCRIPTION

SUBSTANTIATED EFFICACY

MIXTURE OF TWO CALIBRATED EXTRACTS OBTAINED FROM BROWN SEAWEEDS SELECTED FOR THEIR RESOURCES IN SEVERAL PLANT GROWTH SUBSTANCES E.G. AUXINS, GIBBERELLINS, CYTOKINES, ABSCISIC ACID AND BETAINES.

MODE OF ACTION • Boosts skin metabolism for epidermal restructuration, dermal reinforcement and

• Inhibits hyaluronidase, thereby helps reduce skin dryness.

• Inhibits elastase, the enzyme which breaks down elastin in the skin.

> IL-6 stimulation that strengthens wound healing > IL-1 α inhibition that soothes inflammation.

PHYTOHORMONES ARE NOT SIMILAR TO FLAVONOID PLANT ESTROGENS.

increased mitochondrial activity.

premature extrinsic ageing.

• Modulates cytokine balance:

USE LEVEL: 1%-4%

PRODUCTID

CONCEPT

UNIQUE SYNERGISTIC

GROWTH SUBSTANCES

COMBINATION OF ALGAL

PATENTED: Patented

INCI NAME: Water (and) Ascophyllum nodosum extract (and) Halopteris scoparia extract

COMPLIANCE







BENEFITS

Ideal ingredient for care products intended for overstretched, tired or mature skin characterized by decreased thickness, dryness and signs of ageing.

Protects against UVB known to induce the formation of sun burn cells and accelerate

FIRM'ACT®

DESCRIPTION

COMPLEX OF TWO BROWN SEAWEEDS CALIBRATED EXTRACTS WITH A SPECIFIC EXTRACT OF SACCHAROMYCES CEREVISIAE SUPPLEMENTED WITH SELENIUM IN CULTURE. HIMANTHALIA ELONGATA PROVIDES MINERALS AND ANTI-OXIDANT PROPERTIES. FUCUS VESICULOSUS BRINGS POLYPHENOLS AND FUCOIDAN. THEREFORE, IT SUPPORTS ANTI-AGEING EFFECTS AND COMFORTS THE ANTI-OXIDANT PROPERTIES OF HIMANTHALIA.

SUBSTANTIATED EFFICACY

- MODE OF ACTION Targets adaptive defensive stress response through hormesis-based prevention to reinforce cell detoxification and protect from harmful environments, thereby maximizes cellular adaptation for a better skin preparation against aggressors damage.
 - Strengthens the dermal structure to boost the extracellular matrix maintenance:
 - > Stimulation of fibroblast proliferation
 - > Stimulation Type I collagen synthesis
 - > Stimulation hyaluronic acid synthesis.

CLINICAL TESTS • Increases antioxidant capacity and protects skin against UV-induced.

 \bullet Delays facial skin sagging and increases skin firmness & elasticity.

BENEFITS

Effective agent capable to elicit efficient stress response for healthy and younger looking face.

CONCEPT

TARGETS ADAPTIVE **DEFENSIVE STRESS** THROUGH HORMESIS **BASED-PREVENTION**

PRODUCTID

USE LEVEL: 3%-5%

INCI NAME: Water (and) Himanthalia elongata extract (and) Fucus vesiculosus extract (and) Saccharomyces cerevisiae extract



DERMOCEA®

DESCRIPTION

COMBINATION OF SUCROSE WITH TWO RED SEAWEEDS CALIBRATED EXTRACTS FROM MERISTOTHECA DAKARENSIS (: M. SENEGALENSIS) ENDEMIC SPECIES FROM SENEGAL AND JANIA RUBENS FROM THE MEDITERRANEAN SEA.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Acts on both the epidermis and the dermis.

- Restructures the epidermis to reinforce skin integrity:
 - > increase of keratin K 14 expression.
- Reduces saggy skins by enhancing skin moisture, restoring skin volume and increasing skin firmness, maintaining the hydration of dermal tissues through:
 - > Activation of the synthesis of GAGs, collagens I & III
 - > Inhibition of MMP-1 activity
 - > Inhibition of hyaluronidase activity.

BENEFITS Innovative marine approach for the prevention and treatment of the major signs of ageing.

OKINACEA®

DESCRIPTION

CALIBRATED ACTIVE AGENT OBTAINED FROM GREEN CAVIAR: SEA GRAPE OBTAINED IN CONTROLLED CULTURE AND ASSOCIATED WITH HYDROLYZED RICE PROTEINS.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Reinforces the stability of the dermal epidermal junction (DEJ), thereby guarantees efficient functionality and integrity between the epidermis and the dermis:

- > Stimulation of Type IV collagen and laminin-5 synthesis.
- Ameliorates skin firmness by reinforcing the dermal structure:
 - > Stimulation of GAGs & Type I collagen synthesis.

CLINICAL TESTS • Reduces skin roughness - anti-wrinkle activity.

BENEFITS All the power of Green caviar to limit the ageing process.

CONCEPT

INNOVATIVE ASSOCIATION OF TWO RED ALGAE FOR A PLUMPER AND FIRMER

PRODUCTID

USE LEVEL: 0.5% - 2%

INCI NAME: Water (and) sucrose (and) Meristotheca dakarensis extract (and) Jania rubens extract.

COMPLIANCE





CONCEPT

THE ANTI-AGEING POWER BEHIND GREEN CAVIAR / SEA GRAPE. A DELICACY IN OKINAWA, THE JAPANESE ISLAND OF CENTENARIANS

PRODUCTID

USE LEVEL: 1%-5%

INCI NAME: Water (and) Caulerpa lentillifera extract (and) Hydrolyzed Rice Bran protein.







EYE CONTOUR CARE

SKIN AGEING

CONCEPT

AGE-DEFYING STRATEGY

PRODUCTID

USE LEVEL: 1%-5%

INCI NAME: Water (and) Macrocystis pyrifera extract (and) Hydrolyzed veast extract

COMPLIANCE

CONCEPT

DARK CIRCLES

WITH CLEVER TRIPLE

EYE PUFFINESS AND

PRODUCTID

USE LEVEL: 3%-5%

INCI NAME: Water (and)

pinnatifida extract (and)

glycerin (and) Undaria

Corallina officinalis

extract

ECOCERT

COSMOS

COMPLIANCE

ACTION ON FINE LINES,







TONIKELP®

DESCRIPTION

ASSOCIATION OF A CALIBRATED EXTRACT PREPARED FROM THE GIANT KELP MACROCYSTIS PYRIFERA WITH AN HYDROLYZED YEAST EXTRACT TO OFFER A RICH COMPOSITION IN ESSENTIAL NUTRIENTS E.G. AMINO ACIDS AND MINERALS.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Saves your skin from premature aging by over-expressing key genes coding for:

> mitochondrial SOD2

=> stimulation of detoxification

> HAS-2 enzyme

=> production of hyaluronic acid

> GADD45A

=> control of DNA repair

> FGF7

=> action for epidermal renewal & wound healing

> Type III collagen synthesis => maintenance of skin elasticity > syndecan 4 synthesis

=> consolidation of ECM adhesion.

CONSUMER **EVALUATION** Backs up skin feeling and healthy younger appearance.

BENEFITS

Perfect solution to minimize the appearance of skin ageing.

TAKES CARE OF THE DELICATE AREA AROUND THE EYES

PHYCO'DERM®

COMBINATION IN A GLYCERIN EXCIPIENT OF TWO EXTRACTS PREPARED FROM THE BROWN ALGA UNDARIA PINNATIFIDA RICH IN FUCOIDAN AND THE RED ALGA CORALLINA OFFICINALIS RICH IN MINERALS.

SUBSTANTIATED EFFICACY

- MODE OF ACTION Stimulates the major defense systems to increase resistance against stressors:
 - $\verb|-Protection| against microbial infections \& associated inflammation.$
 - > Prevention against oxidative stress.
 - > Regulation of cellular redox state & reinforcement of detoxification.
 - Improves dermis properties to reverse skin ageing:
 - > Stimulation of fibroblast proliferation & Type I collagen synthesis.
 - > Up-regulation of genes involved in cell adhesion & hyaluronan synthesis.
 - > Down-regulation of MMP 1 MMP 14 MMP 11 genes.

CONSUMER **EVALUATION**

- Attenuates fine lines and wrinkles of crow's feet.
- Minimizes the appearance of dark circles under the eyes.
- Reduces the volume of under-eye bags to alleviate puffiness.

BENEFITS

Powerful marine pathway to fight against the visible global fatigue of eye contour.

TO INCREASE CELLULAR METABOLISM

SEAVIE®

DESCRIPTION

CALIBRATED ACTIVE INGREDIENT PREPARED FROM THE BROWN SEAWEED FUCUS SERRATUS ABUNDANT IN THE NORTH ATLANTIC.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Offers intense nutrition to revitalize and rejuvenate the skin.

- Guaranties cells life expectancy in food starved conditions.
- Reactivates the cellular energetic status:
 - > Stimulation of the intracellular ATP synthesis.
 - > Maintains proper mitochondrial functioning and good cell metabolism.

BENEFITS A nourishing and energizing marine agent to keep the skin vital.

USE LEVEL: 0,2%-2%

INCI NAME: Water (and)
Fucus serratus extract

COMPLIANCE

CONCEPT

SKIN REPAIR

MARINE ENHANCER OF

PRODUCTID

USE LEVEL: 1%-5%

INCI NAME: Glycerin

Laminaria saccharina extract (and) L-arginine

(and) water (and)

COMPLIANCE

COSMOS

CONCEPT

ANSWER TO

A MARINE-DERIVED

INVIGORATE SKIN

PRODUCTID







TO RESTORE SKIN INTEGRITY

OCEA CARE®

DESCRIPTION

ASSOCIATION OF THE BROWN SEAWEED LAMINARIA SACCHARINA (: SACCHARINA LATISSIMA) AND ARGININE IN A GLYCERIN EXCIPIENT.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Accelerates wound-healing activity to regulate the major phases of skin regeneration:

- > Increase of the differentiation of fibroblasts into myofibroblasts
- > Stimulation of remodelling to up-regulate genes coding for several collagens.
- > Over-expression of essential growth factors => PDGF EGF IGF1.
- Boosts the proliferation of skin cells.

CLINICAL TESTS • Favors

- Favors skin's natural recovery and increases skin hydration.
- Improves superficial skin imperfections.

BENEFITS Efficient strategy to enhance the regenerative capacity of the skin.



TO PREVENT DAMAGE AGAINST REACTIVE SPECIES & FREE RADICALS

ASTAPLANCTON® G8

DESCRIPTION

AQUEOUS AGENT PREPARED FROM THE GREEN VEGETATIVE CELLS OF HAEMATOCOCCUS PLUVIALIS CULTURED IN OPTIMAL NUTRITIONAL CONDITIONS UNDER MODERATE LIGHT INTENSITY, ADEQUATE TEMPERATURE AND PH. IT IS SUPPLEMENTED WITH SEA WATER.

SUBSTANTIATED EFFICACY

- MODE OF ACTION Boosts skin metabolism due to its excellent composition in amino acids and minerals.
 - Protects against reactive oxygen species ROS
 - > Scavenging activity.
 - Protects DNA against singlet oxygen & hydroxyl radical.
 - Captures reactive carbonyl species RCS, known to yield AGEs that cause damage to cellular proteins:
 - > Protection of proteins from oxidation
 - > Preservation of the fine cell structure against RCS induced damage.
 - \bullet Complementary benefits with ASTAPLANCTON $^{\circ}$ HA prepared from the same microalga Haematococcus pluvialis cultured under inductive high light intensity to induce astaxanthin synthesis.

ASTAPLANCTON COMPLEX forms a highly potent protective duo-system with high performance antioxidant protection to combat accelerated skin extrinsic ageing.

BENEFITS

BENEFITS

For clever advantageous protection against dangerous reactive molecules.

SEA HEATHER®

DESCRIPTION

COMPLEX OF SEVERAL TYPICAL BROWN MEDITERRANEAN SEAWEEDS. CAESPITOSE CYSTOSFIRA SPECIES ONLY OCCURS ALONG THE MEDITERRANEAN COASTS WHERE THEY PLAY THE ROLE OF CANOPY ALGAE TAKEN OVER IN COLD TEMPERATE REGIONS BY THE LAMINARIALES. THEY FORM DENSE POPULATIONS GROUPED INTO LARGE BELTS AT WAVE-EXPOSED PLACES ON UNPOLLUTED AREAS.

SUBSTANTIATED EFFICACY

 $\textbf{MODE OF ACTION} \quad \textbf{.} \ \, \text{Combats damage induced by the both pathways of the lipid peroxidation:} \\$

- Action on the no enzymatic pathway:
 - > Protection against cellular lysis due to several reactive oxygen species: superoxide anion, hydrogen peroxide, alkoxyl radical, singlet oxygen and hydroxyl radical.
- Action on the enzymatic pathway:
 - > Anti-inflammation activity
 - phospholipase A2 induces the production of arachidonic acid
 - 5-lipoxygenase leads to the production of leukotrienes.
- Protects DNA against superoxide anion and hydrogen peroxide.
- Guarantees full cell membrane functionality after chemical irritation.

CLINICAL TESTS • Lowers skin reactivity to reduce stinging sensations.

Excellent anti-lipoperoxide activity recommended to improve the comfort of reactive

CONCEPT

ADVANCED SCAVENGER OF REACTIVE SPECIES

PRODUCTIO

USE LEVEL: 0,5%-2%

INCI NAME: Water (and) Haematococcus pluvialis extract (and) sea water

COMPLIANCE









THE BEST RADICAL SCAVENGER FROM THE MEDITERRANEAN

PRODUCTID

USE LEVEL: 2%-10%

PATENTED: Patented

INCI NAME: Water (and) Cvstoseira amentacea/ caespitosa/brachycarpa







PHYACTYL®

DESCRIPTION

CONCENTRATED AND STANDARDIZED FRACTION OF THE INVASIVE "ALIEN" BROWN ALGA SARGASSUM MUTICUM COLLECTED IN THE MEDITERRANEAN.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Protects against the most harmful ROS: singlet oxygen, superoxide anion, hydrogen

- peroxide and hydroxyl radical.
- \bullet Protects DNA against singlet oxygen and hydroxyl radical.
- Protects against ozone.
- Protects against chemical stress (sodium lauryl sulfate).

BENEFITS Ideal marine active to detoxify and purify the skin.

CONCEPT

A DETOXIFYING AGENT FROM MARINE ORIGIN

PRODUCTIO

USE LEVEL: 2%-5%

PATENTED: Patented

INCI NAME: Water (and) Sargassum muticum extract

COMPLIANCE







TO PREVENT DAMAGE AGAINST POLLUTION AND EXTREME **ENVIRONMENTAL CONDITIONS**

KIMARINE®

DESCRIPTION

LOW MOLECULAR FRACTION PREPARED FROM THE BROWN EDIBLE SEAWEED UNDARIA PINNATIFIDA ALSO KNOWN AS WAKAME, PLAYING A MAJOR ROLE IN ASIAN MARKET FOR FOOD AND MEDICINE.

SUBSTANTIATED EFFICACY

- MODE OF ACTION Reinforces the natural defense system against everyday damage due to major free radicals e.g. super anion oxide and hydrogen peroxide.
 - Protects UVA-induced damage.
 - Counter-regulates the effects of skin against urban pollution:
 - > Protection against cigarette smoke
 - > Protection against exhaust fumes
 - > Protection against heavy metals e.g. cadmium and lead.

BENEFITS

Marine shield to protect the skin against daily skin pollution.

CONCEPT

PROTECTS THE SKIN AGAINST CITY POLLUTION

PRODUCTID

USE LEVEL: 2%-5%

PATENTED: Patented

INCI NAME: Water (and) Undaria pinnatifida extract







CONCEPT

SAFEGUARDS THE SKIN AGAINST EXTREME ENVIRONMENTAL CONDITIONS

PRODUCTID

USE LEVEL: 0.5%-3%

PATENTED: Patented

INCI NAME: Water (and) Rissoella verruculosa extract

COMPLIANCE





OROSEA®

DESCRIPTION

CALIBRATED AGENT BASED ON THE HUGE CAPACITY OF THE RED MEDITERRANEAN ALGA RISSOELLA VERRUCULOSA TO RESIST TO SEVERE ENVIRONMENT WITH HIGH DEGREE OF HABITAT ADAPTATION. THIS ALGA IS UNIQUE BY ITS ECOLOGICAL CHARACTERISTICS: IT IS THERMOPHILOUS, SILICICOLOUS, PHOTOPHILE, REVIVISCENTE, EURYTHERMAL AND EURYHALINE.

SUBSTANTIATED EFFICACY

- MODE OF ACTION Strengthens the skin's defence from outside aggressions acting as an efficacious shield thanks to a unique ecological strategy.
 - Protects against extreme environmental conditions (heat-cold-osmotic stresses).
 - · Modulates the expression of numerous genes involved in cellular defence: HSP response cellular redox regulation, cell apoptosis prevention, antioxidant protection, inflammation prevention, thereby ensures a better control of stress protein synthesis, increases survival and combats premature skin ageing to keep skin metabolism at a suitable level without additional spending energy.

- **CLINICAL TESTS** Provides the skin comfort via moisturizing after unique application for 8h.
 - Improves the skin's appearance after two days applications only.

BENEFITS

New approach to energize and protect the skin while to enhance repair against severe climatic stresses.

SYSTEMIC PROTECTION AND SKIN REGENERATION AGAINST **EXPOSOME FACTORS TO MAINTAIN AND RESTORE HEALTHY SKIN**

OCEA HEALTH®



COMBINATION OF 1,3 PROPANEDIOL (COSMOS GRADE) WITH A CALIBRATED EXTRACT OF THE BROWN ALGA PADINA PAVONICA COLLECTED IN THE MEDITERRANEAN SEA.

SUBSTANTIATED EFFICACY

- MODE OF ACTION Reinforces epidermal integrity and cell resilience: improvement of cornification, epidermal cohesion and communication.
 - Increases the skin's capacity to handle environmental factors: HSP, oxidative, UV, atmospheric pollution and osmotic stresses with appropriate defense responses.
 - Boosts the immune protection: modulation of AMPs and TLRs.
 - Soothes inflammation: inhibition of IL-1alpha.
 - Improves wound healing: regulation of the chemokine balance.

CONSUMER EVALUATION

· Ameliorates the status of sensitive skin to increase comfort and skin qualities (vs placebo)

BENEFITS

Unique marine active to strengthen skin natural defensome in coordinated responses.

CONCEPT

THE FIRST DEFENSOME **ENHANCER TESTED ON OVER 3 300 GENES**

PRODUCTID

USE LEVEL: 3%

PATENTED: Patented

INCI NAME: Water (and) Padina pavonica thallus extract (and) propanediol





TO REGULATE SKIN PIGMENTATION

LIGHTOCEANE®

DESCRIPTION

CALIBRATED AGENT PREPARED FROM THE BROWN SEAWEED HALIDRYS SILIQUOSA CONSIDERED AS EUROPEAN ATLANTIC ENDEMIC.

IT IS KNOWN FOR ITS SPECIAL CHEMICAL COMPOSITION RICH IN OLIGOMERS OF PHLOROGLUCINOL AND SECONDARY METABOLITES AND ITS EFFICIENT BIOLOGICAL PROPERTIES EG. ANTIOXIDANT, ANTIBACTERIAL, ANTIBIOTIC, ANTIPROTOZOAL AND ANTIFOULING PROPERTIES.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Offers a clever mechanisms of action against melanogenesis to influence all main pathways involved in this process:

> Action before melanin synthesis

-> reduction of the production of nitric oxide NO

=> with 1 % active - 72 % inhibition with 15 mJ.cm² irradiation.

> Action during melanin synthesis

-> inhibition of tyrosinase & melanin synthesis

=> with 1 % active - 93 % inhibition tyrosinase activity

=> ex-vivo study on human skin explants at day 10.

> Action after melanin synthesis

-> control of melanosome transfer to keratinocytes

=> with 2 % active + 98 % increase TRP-1 cells number at day 10 compared to no irradiated control.

=> ex vivo study on human skin explants at day 10 irradiated.

> Complementary properties:

protection against free radicals and UVA/UVB radiations.

 \bullet protection against inflammation (inhibitions LOX and IL-1 $\!\alpha).$

• protection against protease deterioration, notably anti-collagenase, anti-elastase and anti-hyaluronidase properties.

BENEFITS

DESCRIPTION

Marine multi-targeted strategy to lighten the skin.

LIGHTOCEANE® G40

LIGHTOCEANE® G40 IS SUPPLEMENTED WITH 40% PLANT ORIGIN GLYCERIN.

PRODUCTID

INCI NAME: glycerin (and) water (and) Halidrys siliquosa extract

CONCEPT

POTENT SKIN

LIGHTENER FROM THE

PRODUCTID

USE LEVEL: 1%-3%

Halidrys siliquosa

COMPLIANCE

extract

ECOCERT

PATENTED: Patented

INCI NAME: Water (and)



HYDRATION & BARRIER FUNCTION

TO MAINTAIN SKIN HYDRATION & WATER BALANCE

MIRUAL®

DESCRIPTION

CALIBRATED AGENT OBTAINED FROM CODIUM FRAGILE, A GREEN MACROALGA USED IN TRADITIONAL ASIAN MEDICINE.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Nourishes the skin and helps to reconstitute the NMF.

- Invigorates cell metabolism.
- Adapts its behavior to free radical protection.

CLINICAL TESTS • Improves skin hydration.

BENEFITS Ideal marine solution with dual-action: hydration and antioxidant protection for skin youthfulness maintenance.

SEA MOIST COMPLEX®

DESCRIPTION

COMBINATION OF THE RED ALGA KAPPAPHYCUS ALVAREZII FROM PHILIPPINES WITH SEA WATER IN A GLYCERIN EXCIPIENT.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Synergistic action with glycerin to provide the suitable level of moisture:

> reinforcement of the hydration properties of glycerin.

• Amelioration of the epidermal biosynthetic functions of dry skin.

CLINICAL TESTS • Improves hydration in dry skin.

BENEFITS Potent moisturizer to maintain the skin hydration state all day long.

CONCEPT

MARINE MOISTURIZER & CELL PROTECTOR

PRODUCTIO

USE LEVEL: 1,5%-10%

INCI NAME: Water (and) Codium fragile extract

COMPLIANCE







CONCEPT

FIGHTS BACK AGAINST DRY SKIN TO REPLENISH DEPLETED MOISTURE

PRODUCTID

USE LEVEL: 1%-5%

INCI NAME: Glycerin (and) water (and) Kappaphycus alvarezii extract (and) sea water







TO MINIMIZE TEWL & ROUGHNESS

ALGOMEGA NP®

DESCRIPTION

SYNERGISTIC COMBINATION OF LIPOSOLUBLE FRACTIONS EXTRACTED FROM THE GREEN MICROALGA NANNOCHLOROPSIS OCULATA AND THE RED MACROALGA PORPHYRA UMBILICALIS IN A NATURAL BOTANICAL VIRGIN SEED OIL FROM SILYBUM MARIANUM.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Re-equilibrates lipid deficient skin due to its balanced composition in polyunsaturated fatty acids (omega-3 and omega-6).

- Reduces TEWL, thereby reinforces the skin barrier function.
- · Decreases skin desquamation.
- Guarantees full cell membrane functionality after barrier function damage.

CLINICAL TESTS • Improves skin hydration and reduces water loss.

BENEFITS Functional agent that helps skin built its natural barrier function.

ALGYL®

DESCRIPTION

UNIQUE COMPLEX OF THREE RED MACROALGAE EXTRACTS IN SYNERGISM WITH GLYCERIN.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Reinforces the outside-in barrier to improve the structural basis of the stratum corneum.

- > up-regulation of key biomarkers genes involved in
- keratinocyte differentiation => ZNF-50 involucrin stratifin filaggrin
- sphingolipid metabolism => SMPD1 SPTLC1
- desquamation kallikreins => KLK7 KLK5
- keratinocyte proliferation during epidermis formation syndecans => SDC1 SDC4
- epidermal recovery after stress/ageing conditions.
- > stimulation of involucrin synthesis
- immunolabelling on irradiated skin human explants.
- $\bullet \ {\tt Strengthens} \ {\tt the} \ {\tt inside-out} \ {\tt barrier} :$
 - > up-regulation of desmosomes proteins to improve cellular cohesion
 - > up-regulation of tight junctions components=> CLDN 1 CLDN 4 CLDN 7- OCLN
 - > stimulation of claudin-4 synthesis
 - immunolabelling on irradiated skin human explants.
- Improves the immune barrier:
 - > up-regulation of key biomarkers involved in the antimicrobial function.
- Boosts the antioxidant defense:
 - > up-regulation of genes linked to antioxidant and detoxification process
 - > stimulation of the transcription factor Nrf 2 acting in numerous pathways of cellular defense.
- CLINICAL TESTS Proves skin cohesion and hydration.
 Decreases Trans Epidermal Water Loss (TEWL).

BENEFITS Multifunctional barrier activation through intelligent ways of action to strengthen and regenerate skin barrier functions while to limit barrier deterioration from environmental aggressions.

CONCEPT

STRENGTHENS THE SKIN'S BARRIER FUNCTION

PRODUCTID

USE LEVEL: 3%-5%

INCI NAME: Silybum marianum seed oil (and) Nannochloropsis oculata extract (and) Porphyra umbilicalis extract

COMPLIANCE







CONCEPT

MARINE GUARDIAN OF SKIN BARRIER FUNCTIONALITY

PRODUCTID

USE LEVEL: 1%-4%

INCI NAME: Water (and) glycerin (and) Gigartina stellata/ Kappaphycus alvarezii extract (and) Corallina officinalis extract





SOOTHING & ANTI-INFLAMMATORY

TO PROTECT AND CALM REACTIVE SKIN

EFFICIENSEA®

DESCRIPTION

CALIBRATED AGENT OBTAINED FROM THE BROWN ALGA PELVETIA CANALICULATA. THIS SPECIES IS ENDEMIC TO THE EUROPEAN ATLANTIC OCEAN, COMMONLY FOUND IN ABUNDANCE ON THE ROCKY SHORES. IT IS KNOWN AS "A SEAWEED THAT SHUNS THE SUN" OFFERING HIGH RESISTANCE TO STRESS AGAINST DRYING.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Protects DNA against singlet oxygen-induced damage.

- Keeps inflammation under control:
 - > inhibition of IL-1α, phospholipase A2, 5-lipoxygenase.
- Complementary properties:
 - > protection against UVB and inhibition of elastase.

CLINICAL TESTS • Reduces skin irritation reactions (stinging sensations)

BENEFITS Marine active designed to reduce the appearance of irritated skin.

SEA HEATHER®

DESCRIPTION

COMPLEX OF CAESPITOSE BROWN SEAWEEDS ENDEMIC IN THE MEDITERRANEAN

SUBSTANTIATED EFFICACY

MODE OF ACTION • Combats damage induced by the enzymatic pathway of the lipid peroxidation:

> anti-inflammation activity

- ->phospholipase A2 induces the production of arachidonic acid
- -> 5-lipoxygenase leads to the production of leukotrienes.
- In addition to its effectiveness against free radicals, guarantees full cell membrane functionality after chemical irritation.

CLINICAL TESTS • Lowers skin reactivity by reducing stinging sensation

Ideal agent associating anti-oxidant and anti-inflammation activities to improve the BENEFITS

comfort of reactive and sensitive skins.

CONCEPT

OFFERS EFFICIENT PROTECTION TO IRRITATED SKIN

PRODUCTIO

USE LEVEL: 1%-10%

PATENTED: Patented

INCI NAME: Water (and) Pelvetia canaliculata extract

COMPLIANCE







CONCEPT

THE BEST RADICAL SCAVENGER FROM THE MEDITERRANEAN SEA

PRODUCTID

USE LEVEL: 2%-10%

PATENTED: Patented

INCI NAME: Water (and) Cystoseira amentacea/ caespitosa/brachycarpa







TO IMPROVE THE COMFORT OF FRAGILE AND VULNERABLE SKIN

OCEA DEFENCE®

CONCEPT

MARINE IMMUNITY BOOSTER

PRODUCTID

USE LEVEL: 2%

INCI NAME: Caprylic capric triglycerides (and) Laminaria ochroleuca extract (and) tocopherols

COMPLIANCE







DESCRIPTION

COMPLEX OF AN OILY EXTRACT OF TOCOPHEROLS AND THE BROWN ALGA LAMINARIA OCHROLEUCA PRESENT IN THE ATLANTIC OCEAN AND THE SOUTH-WEST MEDITERRANEAN.

SUBSTANTIATED EFFICACY

- MODE OF ACTION A new approach to regulate the level of tolerance of sensitive and vulnerable skin, against various skin disorders from the external environment.
 - Reinforces the cutaneous shield (gene expression profiling)
 - > boosts the innate immune system
 - > regulates the protective damage mechanisms linked to cellular homeostasis and oxidative stress
 - > protects the connective tissue from degradation
 - > soothes inflammation.
 - > Protects against DNA strand breaks from UVA/visible-induced damage (Comet assay)
 - > With 0.1 % active + 52.8 % DNA protection
 - > With 0.5 % active + 62.8 % DNA protection.

CLINICAL TESTS • Reduces UV-induced redness with a short term efficacy.

BENEFITS

Suitable solution to stimulate skin immunity and improve the comfort of fragile and vulnerable skin.

SEBUM REGULATION

FOR OIL CONTROL

SEBOCEA®

DESCRIPTION

COMBINATION OF TWO EXTRACTS PREPARED FROM THE BROWN MACROALGA FUCUS SPIRALIS AND THE GREEN MICROALGA TETRASELMIS CHUI OBTAINED BY BIOTECHNOLOGY.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Decreases sebum production

> inhibition of 5 α -reductase.

• Limits the resulting irritation

> inhibition of IL-8 and TNF- α

& CONSUMER EVALUATION

CLINICAL TESTS • Decreases the sebum spots number.

• Enlightens complexion of oily skin in only 28 days and leaves the skin looking natural and Smoother.

BENEFITS

Specific algal solution to improve the comfort of the oily skin.

CONCEPT

THE EFFECTIVE MARINE SEBUM REGULATOR

PRODUCTID

USE LEVEL: 1%-3%

PATENTED: Patented

INCI NAME: Water (and) Fucus spiralis extract (and) Tetraselmis chui extract





TO SHAPE AND CONTOUR FATTY AREAS

SLENDYL®

DESCRIPTION

CONCEPT

RESHAPES THE

SILHOUETTE &

PRODUCTID

USE LEVEL: 1%-3%

PATENTED: Patented

INCI NAME: Water (and)

Himanthalia elongata

extract (and) Undaria

pinnatifida extract

COMPLIANCE

ECOCERT ECOCERT

COSMOS

FIRMNESS

PREVENTS THE LOSS OF

UNIQUE BLEND OF TWO BROWN ALGAE EXTRACTS PREPARED FROM HIMANTHALIA ELONGATA AND UNDARIA PINNATIFIDA USING A SPECIFIC MINERAL SPRING WATER KNOWN FOR ITS RICHNESS IN CERTAIN MINERAL (CA – MG) AND ITS THERAPEUTIC BENEFITS FOR THE PREVENTION OF OBESITY.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Intercept fat deposits before they starts to act on the three main pathways:

- > Action on adipogenesis (mature adipocyte formation)
 - -> Blocks adipocyte differentiation to reduce the capacity to store fats in pre-adipocytes through multiple ways of action:
 - => locks precursors recruitment (action before adipose conversion)
 - => regulates differentiation at different time points
 - => triggers the induction of key transcription factors
 - => controls the transport/oxidation of fatty acids
 - => decreases lipid accumulation during pre-adipocytes maturation.
- > Action on lipogenesis
 - -> Regulates lipogenesis to prevent the formation of new adipocytes thus fat storage.
- > Action on lipolysis
 - $\mbox{--}\!\!>\!\!$ Stimulates the lipolysis to promote triglycerides breakdown in adipocytes.
- Firms up the skin naturally
 - > Reinforces the properties of dermis to stimulate Type I collagen synthesis, thereby enhances firmness and gives improved tone.

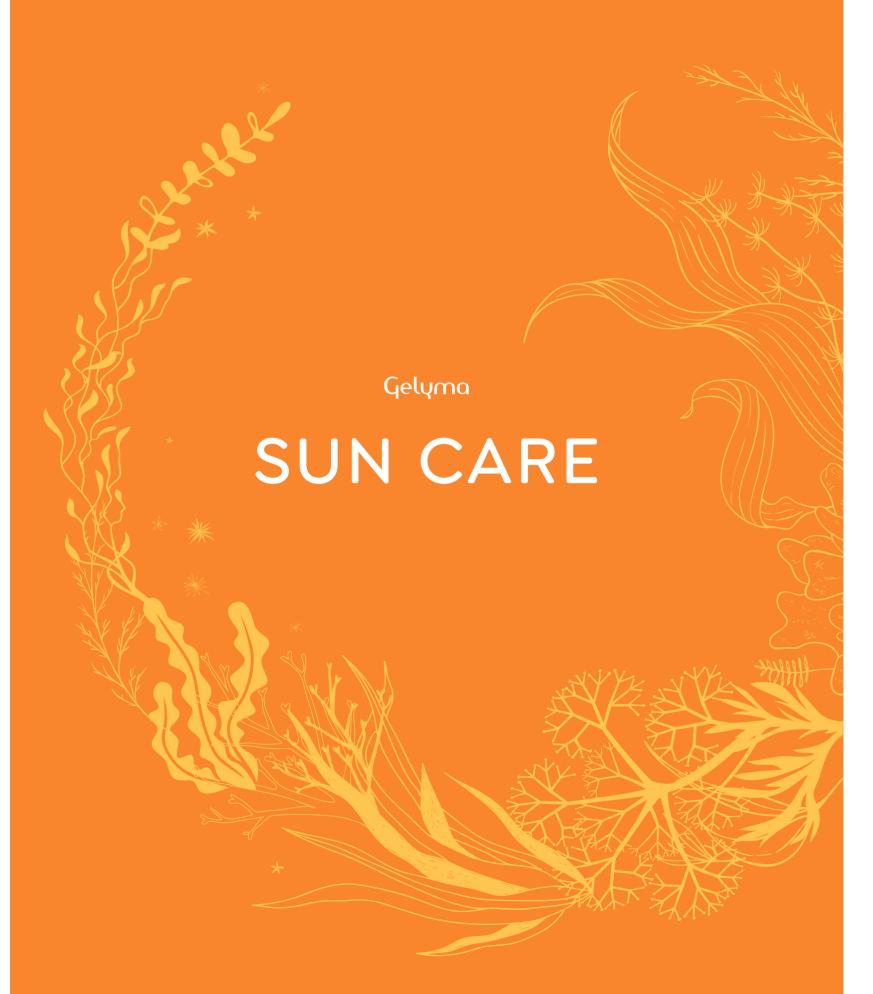
CLINICAL TESTS & CONSUMER EVALUATION

CLINICAL TESTS • Reduces the shape/morphology of the thighs to refine the silhouette

BENEFITS

Innovative marine combination for a multi-targeted sliming activity.

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TO PROTECT AGAINST UV DAMAGE

CONCEPT

ASTAXANTHIN HELPS FOR POTENT UVA-UVB **PROTECTION**

PRODUCTID

USE LEVEL: 0.5%-2%

INCI NAME: Helianthus annuus (Sunflower) seed oil (and) Haematococcus pluvialis extract

COMPLIANCE

CONCEPT

BIOPROTECTOR

PRODUCTIO

USE LEVEL: 1%-4%

extract

ECOCERT

COSMOS

COMPLIANCE

PATENTED: Patended

INCI NAME: Water (and) Porphyra umbilicalis

ACTS AS A GENUINE UVA







ASTAPLANCTON® HA

DESCRIPTION

OILY EXTRACT PREPARED FROM RED, NON-MOTILE RESTING STAGE OF HAEMATOCOCCUS PLUVIALIS CULTURED UNDER INDUCTIVE HIGH LIGHT INTENSITY - SUNLIGHT IN ORDER TO INDUCE THE SYNTHESIS OF THE CAROTENOID ASTAXANTHIN.

SUBSTANTIATED EFFICACY

- MODE OF ACTION Stimulates the cellular metabolism.
 - Shows anti-oxidant protection superior to that of tocopherol.
 - Protects against UVA & UVB radiations.
 - Complementary benefits with ASTAPLANCTON® G8 prepared from the same microalga submitted to various cultivation conditions to obtain different biochemical

ASTAPLANCTON COMPLEX forms a highly potent protective duo-system for high performance antioxidant protection and combat accelerated skin ageing, especially extrinsic ageing.

BENEFITS

Efficient protector against UV damage for delaying skin photoageing

AGAINST UVA INDUCED SKIN ALTERATIONS

HELIONORI®

DESCRIPTION

WATER AND CONCENTRATED ACTIVE INGREDIENT PREPARED FROM THE RED SEAWEED PORPHYRA UMBILICALIS (L.) KÜTZING KNOWN AS "NORI" IN JAPAN.

THIS ALGA CONTAINS MYCOSPORINE-LIKE AMINO-ACIDS (MAAS), A GROUP OF WATER-SOLUBLE NITROGENOUS COMPOUNDS TYPICALLY ABSORBING BETWEEN 310 NM AND 360 NM ACTING AS NATURAL UV SUNSCREENS. THESE COMPOUNDS ARE NEVER PRESENT IN TERRESTRIAL ENVIRONMENTS, EXCEPT IN FUNGI SPORES. THEY AREALWAYS REPORTED IN MARINE ORGANISMS (ANIMALS OR ALGAE) EXPOSED TO INTENSE UV STRESS, THEIR CONCENTRATION BEING CORRELATED TO THE DEPTH AND QUANTITY OF UV.

SUBSTANTIATED EFFICACY

- **MODE OF ACTION** Provides a safe marine alternative to synthetic UVA filters:
 - > agent stable to intense solar light and heat exposure.
 - · Prevents the formation of sun burn cells.
 - Protects cell metabolism against UVA irradiation.
 - Protects DNA (Comet assay on human melanocytes).
 - Protects cell membranes against UVA.

BENEFITS

Genuine natural bioprotector against UVA induced skin alterations to prevent premature photoageing.

AGAINST DAMAGING EFFECTS OF UVA - UVB AND BLUE LIGHT EXPOSURE

SUN'ALG®

DESCRIPTION

HELPS SHIELD YOUR

PRODUCTIO

CONCEPT

SKIN

USE LEVEL: 2%-5%

INCI NAME: Pongamia glabra seed oil (and) Dunaliella salina / Haematococcus pluvialis extract

COMPLIANCE







INNOVATIVE COMBINATION OF NATURAL BIOACTIVE INGREDIENTS:

- PONGAMIA GLABRA SEED OIL (KARANGA SEED OIL, DEODORIZED GRADE) PROVIDING A PRIMARY SHIELD AGAINST UV RADIATIONS, DUE TO ITS IMPORTANT ABSORPTION ABILITY ESPECIALLY FOR UVB BUT ALSO FOR UVA.
- TWO MICROALGAL EXTRACTS PREPARED FROM DUNALIELLA SALINA AND HAEMATOCOCCUS PLUVIALIS RICH IN SEVERAL CAROTENOIDS, BRINGING ADDITIONAL PROTECTIVE CAPACITY:
 - > DUNALIELLA SALINA EXTRACT IS MAINLY RICH IN β -CAROTENE
 - > HAEMATOCOCCUS PLUVIALIS EXTRACT IS CHIEFLY RICH IN ASTAXANTHIN

SUBSTANTIATED EFFICACY

- MODE OF ACTION Strengthens the skin's defence mechanisms to up-regulate the expression of key genes involved in:
 - > oxidative stress/detoxification => NOQO1 (x 125), AKR1C3 (x 328)
 - > DNA repair => GADD45 (x 134)
 - > skin defense => leukotriene B4 receptor 2 (x 141), β defensin 4A (x 302)
 - => cornifin (x 172), TGase-3 (x 197). > barrier function
 - \bullet Offers high protection against both UVA and UVB radiations.
 - Prevents the formation of sun burn cells:
 - > with 5 % active in a basic Carbopol gel, the efficacy is comparable with those of the positive control (commercial cream SPF 50).
 - Fights against inflammatory skin reactions:
 - > inhibition of IL-8.

CLINICAL TESTS • Diminishes redness and soothes sunburns (erythema) with a short efficacy (30 min) from application.

BENEFITS

Unique protector against the daily attacks by harmful UV rays to maintain skin health and good look.

SUN CARE

TO DEVELOP A MORE NATURAL TAN

CONCEPT

FOR A SUN-KISSED & HEALTHY COMPLEXION ALL YEAR ROUND

PRODUCTID

USE LEVEL: 0,5%-5%

PATENTED: Patented

INCI NAME: Water (and) Bifurcaria bifurcata extract (and) acetyltyrosine.

BRONZ'ALG®

DESCRIPTION

CALIBRATED AQUEOUS EXTRACT OF THE BROWN SEAWEED BIFURCARIA BIFURCATA WITH ACETYL-TYROSINE.

BIFURCARIA BIFURCATA IS A LUSITANIC ALGA THAT CONTAINS PARTICULAR INTERESTING CHEMICALS NOTABLY SEVERAL KINDS OF OLIGOMERS OF PHLOROGLUCINOL. IT OFFERS NUMEROUS PROVED BIOLOGICAL PROPERTIES E.G. ANTIOXIDANT, ANTI-MICROBIAL, ANTI-INFLAMMATORY, ANTITUMORAL ACTIVITIES.

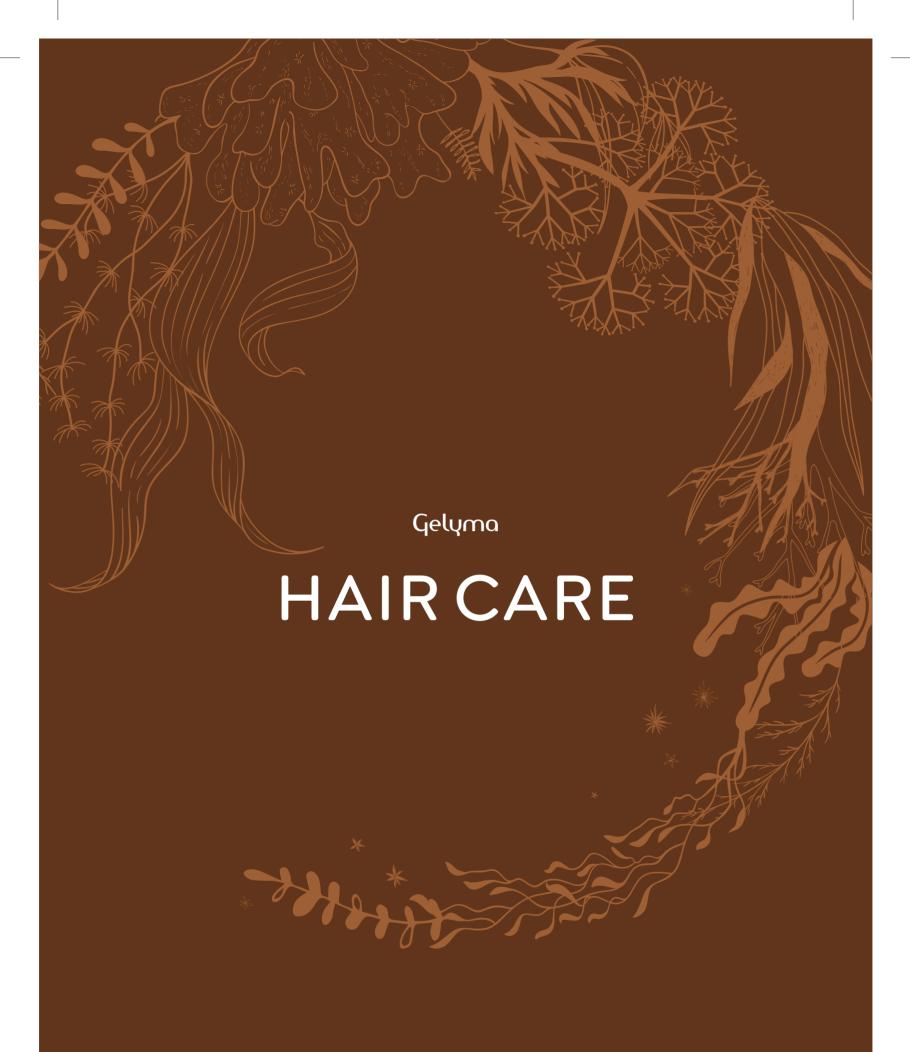
SUBSTANTIATED EFFICACY

- **MODE OF ACTION** Regulates the major genes of melanogenesis pathways notably
 - > MITF factor and melanogenic enzymes TYR and TYRP-1, Wnt/catenin, endothelin/protein kinase signaling pathways implicated in melanin formation, all that makes more compelling the pro-pigmenting capability of BRON7'ALG®
 - \bullet Facilitates the melanin synthesis in melanocytes (action on SLC24A5).
 - Improves the interactions melanocytes-keratinocytes (action on E-cadherin).
 - Protects against UVA/UVB-induced damage, therefore ameliorates skin photoprotection.
 - Promotes skin pigmentation independent to sun exposure. Confirmation by histological staining observations.

- CLINICAL TESTS Accelerates tanning.
 - Induces healthier look & revives dull skin after 28 days application with a significant improvement in the radiance complexion.
 - Guarantees efficient skin protection against free radicals and both UVA and UVB radiations, that helps maintain a harmonious tan and improve the skin's own natural UV protection.

BENEFITS

Smart suntan enhancer from marine origin.



HAIR CARE

AGAINST DAMAGING EFFECTS OF UVA - UVB AND BLUE LIGHT EXPOSURE

KIMARINE® HC

DESCRIPTION

LOW MOLECULAR FRACTION PREPARED FROM THE BROWN EDIBLE SEAWEED UNDARIA PINNATIFIDA ALSO KNOWN AS WAKAME, PLAYING A MAJOR ROLE IN ASIAN MARKET FOR FOOD AND MEDICINE.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Protection against UV radiation

- > Stimulation of the outer sheath stem cells of the follicle submitted to UV
 - -> immunolabelling of the biomarker survivin.
- > Protection of the cuticle of the dyed hair fiber submitted to UVA (preventive and curative effect)
 - -> scanning electron microcopic observations.
- Prevention color fading
 - > study vs placebo on hair tresses submitted to washes and intense UV exposure
- Protection against chemical pollutants
 - > Stimulation of the outer sheath stem cells of the follicle submitted to
 - -> immunolabelling of the biomarker survivin.
 - > Protection of the cuticle of the dyed hair fiber submitted to exhaust fumes and cigarette smoke (preventive and curative effect)
 - -> scanning electron microcopic observations.

CONSUMER • Improves the hair quality in only 56 days of treatment, once a day application (vs **EVALUATION** placebo) BENEFITS Marine shield to protect the hair and the skin against daily skin pollution.

CONCEPT

POWERFUL MARINE STRATEGY TO PRESERVE THE HAIR CAPITAL

PRODUCTID

USE LEVEL: 2%

INCI NAME: Water (and) Undaria pinnatifida extract







DESIGNED TO REINFORCE THE HAIR'S INTEGRITY

CAPHIRA®

DESCRIPTION



HAIR CARE

GLOBAL NATURAL PROTECTOR OF THE HAIR FOLLICLE, FIBER AND SCALP

PRODUCTID

CONCEPT

USE LEVEL: 2%

PATENTED: Patented

INCI NAME: Glycerin (and) water (and) Kappaphycus alvarezii extract (and) sea water





ASSOCIATION OF THE RED MACROALGA KAPPAPHYCUS ALVAREZII FROM PHILIPPINES WITH SEA WATER IN A GLYCERIN EXCIPIENT.

SUBSTANTIATED EFFICACY

MODE OF ACTION • Action on the hair follicle

- > Prevents hair loss:
 - -> increase of follicle survival after only 20 days treatment at 2%.
 - -> stimulates the ferritin pathway known to be linked to alopecia in women presenting iron deficiency: over-expression of gene ferritin + 503%.
- > Boosts follicle metabolism
 - -> modulates the gene expression of growth factors known to be related to alopecia (IGF1R gene +146% - EGFR gene +172%)
 - -> stimulates FGFR2 gene linked to Asian hair thickness + 172%.
- · Action on the hair fiber
 - > Reinforces the hair fiber
 - -> stimulation of keratins synthesis to provide resistance and built stronger hair.
 - > Protects the hair cuticle against damage due to dryness.
 - -> protection of the dry hair cuticle
 - -> protection of the dry hair cuticle after chlorine treatment.

CLINICAL TESTS

- > Restores and enhances the hair shine to improve healthy appearance.
- Action on the hair scalp
 - > Improves the scalp health
 - -> soothing effect against erythema and irritation.

BENEFITS

The hair feels full of vitality and shine and the scalp comfortable and healthy.

OUR ALGAL WORLD

Gélyma sustainably sources Algae from all over the world, taking the utmost care in the purity and quality of their composition.

Macro algae

ATLANTIC OCEAN (EUROPE)

- Ascophyllum nodosum
- Bifurcaria bifurcata
- Corallina officinalis
- Enteromorpha compressa
- Fucus serratus
- Fucus vesiculosus
- Gelidium sesquipedale
- Halidrys siliquosa
- Halopteris scoparia (Stypocaulon scoparium)
- Himanthalia elongata
- Laminaria ochroleuca
- Laminaria saccharina (Saccharina latissima)
- Lithothamnium calcareum
- Palmaria palmata
- Porphyra umbilicalis
- Undaria pinnatifida

ATLANTIC OCEAN (AFRICA)

• Meristotheca dakarensis (Meristotheca senegalensis)

MEDITERRANEAN

- Jania rubens
- Padina pavonica
- Cystoseira sp.
- Rissoella verruculosa
- Codium fragile
- Sargassum muticum

SOUTH PACIFIC OCEAN

- Lessonia nigrescens
- Macrocystis pyrifera
- Durvillaea antarctica

INDIAN OCEAN

• Undaria pinnatifida

CULTIVATION

- Caulerpa lentillifera
- Kappaphycus alvarezii
- Undaria pinnatifida

Micro algae

CULTIVATION FRANCE-SPAIN-HAWAII-AUSTRALIA

- Dunaliella salina
- Haematococcus pluvialis
- Nannochloropsis oculata
- Tetraselmis chui

Gelyma

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