

**For the use of a Registered Medical Practitioner or a Hospital or a Laboratory only**

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## **AHAGLOW SKIN REPAIR GEL**

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### **INGREDIENTS**

Glycerin (and) Aqua (and) Dictyopteris Polipodioides Extract, Water (and) Phenoxyethanol (and) Sodium carrageenan (and) sea salt, Ectoin, Aloe Barbadensis Leaf Juice (and) Potassium Sorbate (and) Sodium Benzoate, Actinidia Chinensis (Kiwi) Fruit Extract, Nelumbo Nucifera (Lotus) Root Water Extract, Acrylates/C10-30 alkyl acrylate crosspolymer, Phenoxyethanol (and) Ethylhexylglycerin, Phenoxyethanol (and) Triethylene glycol, Polyacrylate Crosspolymer-6, Sodium gluconate, Fragrance, Triethanolamine, Purified Water.

### **INDICATION**

Ahaglow skin repair gel is a repair formula designed to restore the integrity and barrier function of skin.

Helps skin overcome the symptoms of skin damage (redness, tanning, burning and dehydration).

Beneficial for superficial skin remodelling post dermatological procedures.

### **Direction for Use:**

Take adequate amount of gel and gently apply on the affected area as directed by physician.

### **KEY INGREDIENTS**

#### **Ectoin**

Ectoin is a small organic molecule that is synthesized and accumulated inside of extremophiles, i.e. micro-organisms that thrive under extreme environmental conditions.

It stabilizes and maintains biological structures (membranes, proteins, enzymes, and nucleic acids) and protects from environmental stresses such as variations in temperature, high salt concentrations, strong UV radiation, or dehydration.

It activates natural protection mechanism of skin under stress conditions. Provides accelerated protection of skin cells against damaging external stress factors

Ectoin protects the number of Langerhans Cells in UV-irradiated human skin and strengthens the immune system of the skin Protection against photo-ageing. It causes activation of natural protection mechanisms (Anti-pollution/Anti-stress). Protects from dehydration and reduces sun burn cells.

#### **Glycerin (and) Aqua (and) Dictyopteris Polipodioides Extract**

It is a brown alga extracted from Dictyopteris membranacea. It is capable to decrease complete melanin production and exportation for a lightening and anti-dark spots effect.

It inhibits:

- melanogenesis activation by endothelin
- tyrosinase activation by the gene MITF
- the gene OA1 responsible for the number and the size of melanosomes
- the maturation of melanosomes via the genes MART A and Pmel17

- the migration of melanosomes via the genes MLPH and Myosin Va

The benefits are: It lightens the skin for a sublimated complexion. It significantly reduces the area of dark spots. It inhibits melanin synthesis and melanosome maturation and therefore melanin exportation to the surface of the skin

### **Water (and) Phenoxyethanol (and) Sodium carrageenan (and) sea salt**

It is a colourless to pale yellow, limpid to opalescent viscous liquid obtained from the red alga *Furcellaria lumbricalis*, widespread in Scandinavian waters. It is a Hi-Tech concentrate of oligofurcellaran, faster and 3 times more efficient than hyaluronic acid to hydrate and restructure the skin.

It has a hyaluronic activator action: stimulates the synthesis of epidermal hyaluronic acid and Ceramide synthesis.

It increases the synthesis of Claudin 1 and ceramides and helps to strengthen the sealing of the epidermis thereby increasing the hydration rate.

The benefits are: It increases the synthesis of epidermal hyaluronic acid. It renews tight junctions to reorganise the keratinocytes in all the layers of the epidermis. Activates metabolism of filaggrin in the corneal layer to enrich NMF with hygroscopic amino acids.

### **Aloe Barbadensis Leaf Juice (and) Potassium Sorbate (and) Sodium Benzoate**

Aloe vera gel is a mucilaginous fluid produced exclusively from the pulp of *A. barbadensis* leaves. Its main constituents are polysaccharides.

**Healing properties:** Glucomannan, a mannose-rich polysaccharide, and gibberellin, a growth hormone, interacts with growth factor receptors on the fibroblast, thereby stimulating its activity and proliferation, which in turn significantly increases collagen synthesis. Due to this, healing process is accelerated. **Effects on skin exposure to UV radiation:** An antioxidant protein, metallothionein, is generated in the skin, which scavenges hydroxyl radicals and prevents suppression of superoxide dismutase and glutathione peroxidase in the skin. It reduces the production and release of skin keratinocyte-derived immunosuppressive cytokines such as interleukin-10 (IL-10) and hence prevents UV-induced suppression of delayed type hypersensitivity.

**Anti-inflammatory action:** Aloe vera inhibits the cyclooxygenase pathway and reduces prostaglandin E2 production from arachidonic acid, thus showing anti-inflammatory effects.

**Moisturizing and anti-aging effect:** Aloe stimulates fibroblast which produces the collagen and elastin fibers making the skin more elastic and less wrinkled. It also has cohesive effects on the superficial flaking epidermal cells by sticking them together, which softens the skin. The amino acids also soften hardened skin cells and zinc acts as an astringent to tighten pores.

### **Actinidia Chinensis (Kiwi) Fruit Extract**

It is the vegetable water of Kiwi, which has moisturizing, tyrosinase inhibition and Radiance properties.

**Trans-epidermal water loss (TEWL) regulating activity:** The moisturizing activity of kiwi is due to its carbohydrates and  $\alpha$ -hydroxyacids (AHA) content.

Monosaccharides are hygroscopic, namely they are able to adsorb water and consequently maintain the moisture level of the horny layer.

**Whitening:** Kiwi fruit has considerable amounts of ascorbic acid and citric acid that give it a considerable capacity to inhibit tyrosinase enzyme hence giving a whitening effect on the skin.

**Photo-Protection:** Vitamin C is a potent antioxidant with radical scavenging activity very useful in the treatment of photoaging. Vitamin C can neutralize free radicals generated by UVB and UVA radiation; Therefore, kiwi extract is highly recommendable to formulate cosmetic products aimed at preserving the skin and hair integrity from oxidative processes.

### **Nelumbo Nucifera (Lotus) Root Water Extract**

It is the Vegetable water of Lotus root. It has Anti-oxidant and anti-free radical power boosting activity by Inhibition of CGRP liberation.

It reduces the liberation of CGRP, a pro-inflammatory mediator. Improves the cell viability of neurons and the anti-oxidant power of Vitamin C. It claims to have calming and soothing activity.

### **STUDY DATA**

Two studies were conducted:

#### **1. 24 Hour Study**

- To evaluate the immediate hydration of skin, after application, of 1 test product on volar forearms.
- To evaluate the hydration of skin, after application, of 1 test product on volar forearms, over duration of 24 hours.

10 participants were randomly allocated. The forearms of each participant were cleaned, sites of 3 X 3 cm<sup>2</sup> area was marked on volar forearms of participants, approximately 0.030 g of the product was applied on test sites by massaging for 30 seconds using a fingerstall. There was no product application at the control site. Following parameters were considered to evaluate effectiveness of Ahaglow Skin Repair Gel:

- Skin Hydration Measurements using Moisture Meter SC
- Effect on skin barrier properties by Vapo Meter

#### **2. 4 Weeks Study**

- To evaluate the effect of a test product “Moisturizer” on various parameters like skin hydration, radiance of skin and spot reduction after application on face for a duration of 1 month.
- To evaluate the in-use tolerance of the Product

17 participants having at least one spot > 4mm on face (either of PIH post acne/freckles/solar lentigine) were enrolled in the study. Approximately 0.5 g of test product was applied on entire face by massaging for 30 seconds. Product was applied twice daily – Morning and night, the age of the participants ranged from 18-55 years. Following parameters were considered to evaluate effectiveness of Ahaglow Skin Repair Gel:

- Skin hydration measurements using Moisture Meter SC
- Skin gloss measurements using Skin Gloss Meter

- L\* and ITA values on neat skin and spot using Spectrophotometer • Subjective self-assessment
- Dermatologists assessment

### **EFFECT OF AHAGLOW SKIN REPAIR GEL ON SKIN**

The following conclusions can be drawn at the end of the study (after 24 hour of Product application), as compared to baseline. Based on instrumentation:

- Skin moved from dry skin category to normal skin category at 1 hour after product application and was maintained in normal skin category upto 24 hours.
- At all time points, mean VapoMeter readings showed a decrease from baseline.

The following conclusions can be drawn at the end of the study (after 30 days or 4 weeks of Product application), as compared to baseline. Based on instrumentation:

- There was an improvement in skin hydration and the skin moved from normal skin into well-hydrated skin category.
- There was an improvement in skin gloss.
- There was a slight improvement in skin luminescence and a lightening of skin colour both on hyperpigmented spot and neat skin. as compared to baseline

Based on self-assessment:

- 100% of participants agreed that their skin had become well moisturized, more than 90% of participants agreed that there was a visible fairness on face, and overall product was good.
- More than 80% agreed that there was a visible glow on face, visible lightening of black spots and that skin tone had become more even.

The Product was well tolerated by all participants.

### **UNDESIRABLE EFFECTS**

There were no adverse events reported during the entire study duration by any participant for any Product.

### **USE IN SPECIAL POPULATION**

Avoid usage during pregnancy and breast-feeding

#### **Aloe Barbadosis Leaf Juice**

Oral aloe is not recommended during pregnancy due to theoretical stimulation of uterine contractions, and in breastfeeding mothers, it may sometime cause gastrointestinal distress in the nursing infant.

### **CONTRAINDICATIONS**

- Hypersensitivity to any cosmetic product, raw material.
- Discontinue use, if signs of irritation or rash appear.
- Avoid contact with eyes, rinse with water immediately in case of accidental contact.
- Do not swallow.

## **DRUG INTERACTIONS**

If your doctor has directed you to use this product, or if you use any prescription product on the skin, tell your doctor or pharmacist of all prescription and non-prescription/herbal products you may use, including other skin care products.

### **Aloe Barbadensis Leaf Juice**

Application of aloe to skin may increase the absorption of steroid creams such as hydrocortisone. It reduces the effectiveness and may increase the adverse effects of digoxin and digitoxin, due to its potassium lowering effect. Combined use of Aloe vera and furosemide may increase the risk of potassium depletion. It decreases the blood sugar levels and thus may interact with oral hypoglycaemic drugs and insulin.

## **UNDERSTANDING THE BASICS OF SKIN**

Skin is the body's largest organ and has 3 layers.

- The top layer is called the epidermis. It protects the underlying skin layers from the outside environment.
- The second layer is the dermis. It contains cells that provide strength, support, and flexibility to the skin.
- The last layer is the hypodermis. It contains the fat cells or adipose tissue that insulates the body and helps it conserve heat.

## **FUNCTIONS OF THE SKIN**

- First line of defence
- Protection from dehydration, pathogens, and injury
- Regulates body temperature

## **FACTORS CONTRIBUTING TO SKIN DAMAGE**

- Solar radiations, Pollutants, Weather, Laser treatments, Stress and Smoking,
- Skin conditions like Acne /dermatitis / rosacea
- Hormonal dysfunction , Medication side effects

## **WHAT IS SKIN REPAIR GEL?**

After exposure to skin damaging factors (environmental factors, dermatological procedures, etc...), skin needs special care. While we can't undo the damage but we can accelerate the repair with skin repair gel.

Skin repair gel is crucial for rehydrating damage skin. It also helps to repair our skin by cooling it down and locking in lost moisture.

## **BENEFITS OF USING AHAGLOW SKIN REPAIR GEL**

- Lightweight gel that gets easily absorbed.
- Formulated with soothing botanical extracts (Lotus, Kiwi, Aloe vera )
- Reduces the number of sunburn cells (Ectoin- Literature based)

- Hydrates and replenishes the skin (Marine based moisturizing active)
- Lightens skin tone (Marine based skin lightening active)
- Acts as an Anti oxidant
- It is Non comedogenic

**EXPIRY DATE**

Use before 24 months from the date of manufacture

**STORAGE**

Store below 30°C, Protect from light. Keep out of reach of children.  
Keep tightly closed after use.

**MARKETED BY**

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