

PRODUCT, DESCRIPTION AND EVIDENCE

H₂∞ ECO

This luxury silky moisturiser is formulated to keep skin optimally hydrated and in peak condition. Blended with Tara Seed Extract, Tripeptide-1, Tetrapeptide-7 and Vitamins B & C, it will help calm and restore the skin's natural moisture barrier, boost moisture levels and help minimise future dehydration.

INGREDIENTS

Aqua, Glycerin, Silybum Marianum Ethyl Ester, Helianthus Annuus Seed Oil, Arachidyl Alcohol, C20-22 Alkyl Phosphate, Butyrospermum Parkii Butter, Persea Gratissima Oil, Simmondsia Chinensis Seed Oil, Theobroma Grandiflorum Seed Butter, Saccharide Isomerate, C20-22 Alcohols, Behenyl Alcohol, Hydrolyzed Corn Protein, Panthenol, Phenoxyethanol, Tocopherol, Hydrolyzed Wheat Protein, Arachidyl Glucoside, Butylene Glycol, Hydrolyzed Soy Protein, Caesalpinia Spinosa Gum, Parfum, Alantoin, Sodium Gluconate, Vaccinium Vitis-Idaea Fruit Extract, Sodium Hydroxide, Benzoic Acid, Dehydroacetic Acid, Leuconostoc/Radish Root Ferment Filtrate, Carbomer, Sodium Lactate, Citric Acid, Sodium Citrate, Glucose, Polysorbate 20, Pantolactone, Xanthan Gum, Gluconolactone, Sodium Benzoate, Palmitoyl Tripeptide-1, Palmitoyl Tetrapeptide-7, Calcium Gluconate.

ACTIVE INGREDIENTS

Glycerin, Butyrospermum Parkii Butter, Persea Gratissima Oil, Simmondsia Chinensis Seed Oil, Theobroma Grandiflorum Seed Butter, Saccharide Isomerate, Hydrolyzed Corn Protein, Panthenol, Tocopherol, Hydrolyzed Wheat Protein, Hydrolyzed Soy Protein, Vaccinium Vitis-Idaea Fruit Extract, Palmitoyl Tripeptide-1, Palmitoyl Tetrapeptide-7.

GLYCERIN

Glycerin is a humectant which is present in all-natural lipids. Derived from natural substances by hydrolysis of fats and by fermentation of sugars. Our palm-free vegetable glycerine is a skin-friendly humectant which draws water to the skin. It has wonderful emollient and water-retaining properties. Use it in your creams, lotions, and serums. Known for its fantastic emollient and hydrating abilities, glycerine is one of the most versatile and widely used skin care cosmetic ingredients on the market. It is a natural humectant and lubricant, making it an ideal cosmetic ingredient for skin and hair care products. Our palm-free glycerine is a non-irritating, soothing moisturiser that not only boosts skin elasticity, but it contains anti-bacterial and softening properties making it an ideal candidate for sensitive skin care; treating dry, cracked skin, eczema, acne or burns and rashes.

1: [International Journal of Cosmetic Science, August 2016, ePublication](#)

2: [British Journal of Dermatology, July 2008, pages 23-34](#)

3: [Journal of Cosmetic Dermatology, June 2007, pages 75-82](#)

4: [Proceeding of the National Academy of Sciences, June 2003, pages 7,360-7,365](#)

BUTYROSPERMUM PARKII BUTTER

A botanical ingredient derived from the seeds of the African Shea tree. Also known as Shea butter. It acts as a skin conditioning agent. Firstly, it helps retain moisture and lessen the loss of water by forming a barrier on the skin's surface. Secondly, it also works to reduce the appearance of rough patches and dry flakes on the skin. It acts as a moisturizer because of its content of unsaponifiable fats- meaning that, unlike other fatty oils, it does not turn into soap when in the presence of a potent alkali, thus retaining its moisturizing abilities.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5796020/>

PERSEA GRATISSIMA OIL

Avocado Oil is rich in Vitamins A, D and E and can penetrate quickly into the lower skin layers to promote healing, skin

regeneration and protection from the ageing effects of UV light and pollution. Used topically, vitamin-rich Avocado Oil smooths wrinkles, helps to tighten the skin and diminish blemishes. It is also gentle enough to be used on dry, ageing, rough or sensitive skin.

The main chemical constituents of Avocado Oil are: Palmitic Acid, Palmitoleic Acid, Stearic Acid, Oleic Acid, Linoleic Acid, Alpha Linoleic Acid. These chemical constituents all carry their own set of beneficial skin properties: Palmitic Acid has emollient properties; Palmitoleic Acid helps delay the appearance of premature ageing, moisturises and tightens skin, enhances skin complexion and skin elasticity; Stearic Acid has cleansing properties and can balance out excess sebum and soften skin; Oleic Acid helps skin suppleness and helps reduce the signs of ageing Linoleic Acid has anti-inflammatory properties and promotes moisture retention in skin.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249906/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6600360/>

SIMMONDSIA CHINENSIS SEED OIL

Joboba has anti-inflammatory effect and it can be used on a variety of skin conditions including infection and ageing, as well as wound healing. Moreover, jojoba has been shown have hydrating and photoprotective properties.

<https://www.ncbi.nlm.nih.gov/pubmed/24442052>

THEOBROMA GRANDIFLORUM SEED BUTTER

Cupuacu Butter, also known as Theobroma grandiflorum seed butter, from the Cupuacu Tree is found in Northern Brazil in the Amazonian rain forest. The pulp of the fruit that the tree bears provides cupuacu butter. It is a modern plant-based alternative to lanolin, which is a major sensitizer and produces untoward allergies and side effects in many individuals. Cupuacu's ability to penetrate the skin quickly (transdermal penetration), and then retain moisture, is unparalleled and far superior to shea butter or lanolin. A simple water absorption study was performed in the lab. Water was added to each of the following: cupuacu, shea butter and lanolin, with stirring, until separation was observed. Cupuacu could support 440% of its weight in water, which means that 1 kg of cupuacu butter could absorb 4.4 kg of water before any division of phases was noted. Cupuacu butter offers the capacity to attract water allowing it to function much more effectively as a skin hydrator and plumper.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4495740/>

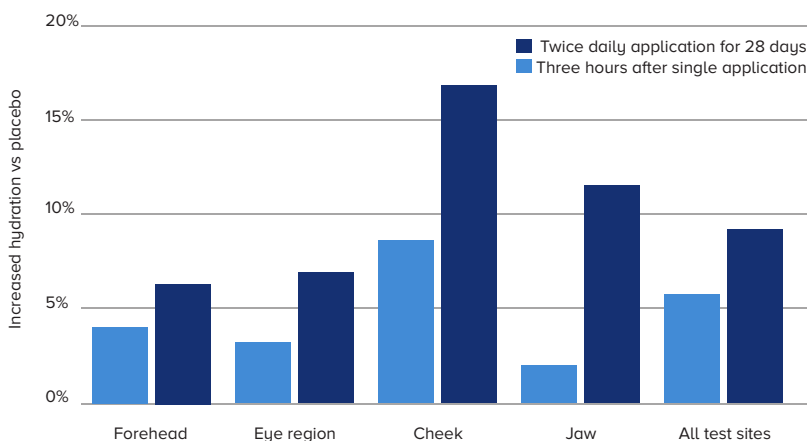
SACCHARIDE ISOMERATE

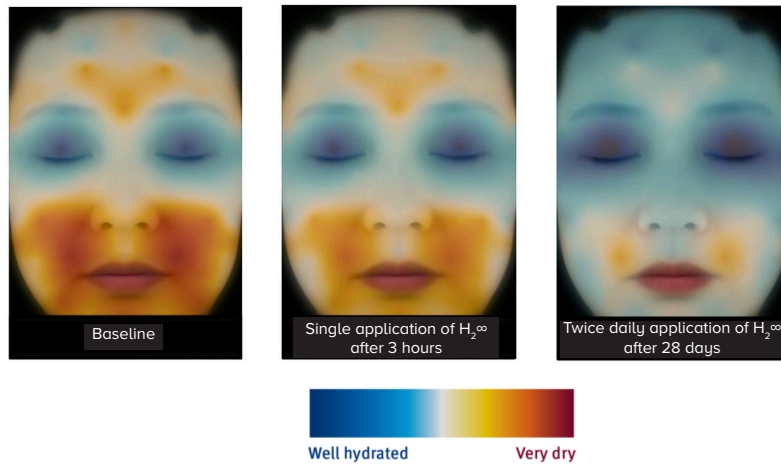
Saccharide Isomerate Complex is a 100% plant-derived carbohydrate complex, similar to that found in human skin. The molecules bind to the skin, preventing epidermal water loss, delivering immediate & long-lasting hydration for up to 72 hours₄. As a vegan hyaluronic acid booster, Saccharide Isomerate complex contains no animal by-products, so you can be confident that H₂[∞] is cruelty-free and highly efficacious₄.

Saccharide Isomerate Complex is clinically proven to provide short and long-term hydration. The case study image below shows the increase in hydration to the stratum corneum after 3 hours and after 28 days, where H₂[∞] was applied twice per day₄.

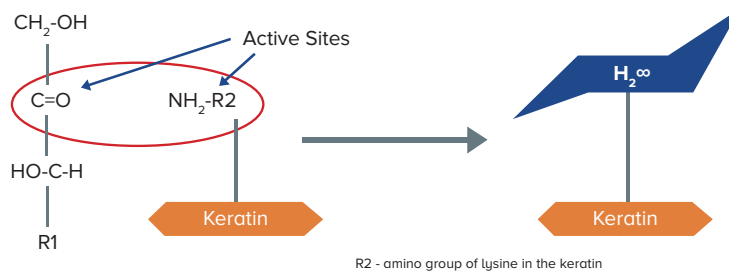
Saccharide Isomerate vs. Placebo

After twice daily application of H₂[∞], there is a significant improvement in hydration across all facial areas. Just 3 hours after a single application, the excessively dry cheek area is significantly more hydrated.

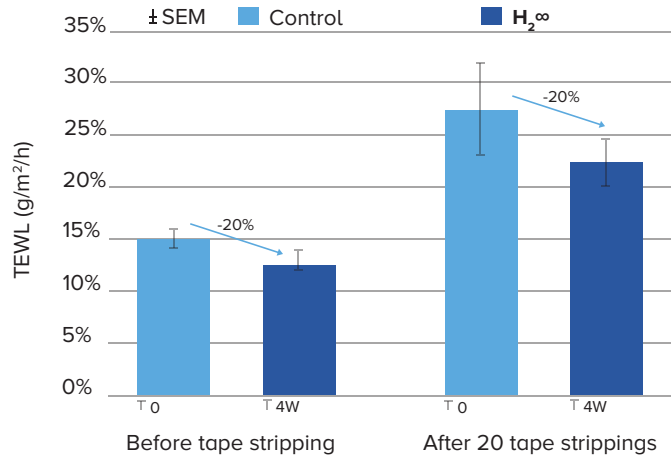




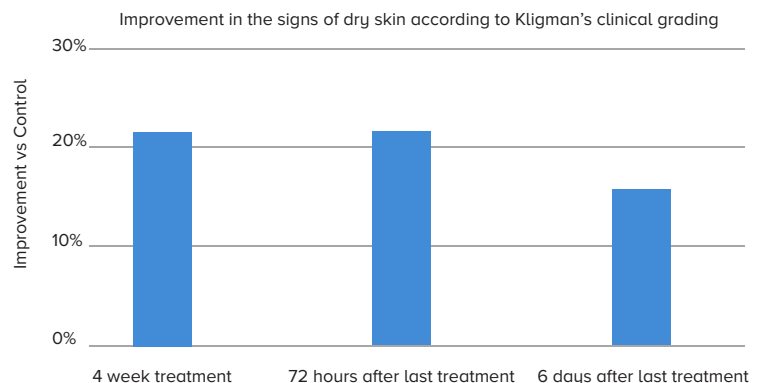
The in-vivo and in-vitro studies have proven the unique binding of this Saccharide Isomerate Complex to the free amino group of lysine in keratin. After 4 weeks of continuous use, H_2^∞ improves the signs of dry skin by 20%, with effects lasting long after the final application 6 days later. This binding function allows the Saccharide Isomerate Complex to connect with the top layer of the skin, locking in moisture₅.



Saccharide Isomerate Complex in an aqueous solution improves and strengthens the skin barrier function as shown by the 20% reduction in trans-epidermal water loss before and after 20 successive tape strippings after a 28-day application₄.



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1. International Journal of Cosmetic Science, 2015, 37, 595-605
2. International Journal of Cosmetic Science, 2016 38, 217-223
3. Data on file.
4. Data on file.
5. G.Padberg, J. Soc.Cosmetic Chemists 23, 271-279, 1972

HYDROLYZED PROTEINS - CORN, WHEAT & SOY

In the skin, hydrolyzed proteins are among a group of key nutrients that are often referred to as the natural moisturizing factor (NMF). These compounds are responsible for maintaining moisture content and suppleness of the skin by attracting and retaining water to keep the outer layer of the stratum corneum hydrated. Hydrolyzed proteins derived from plants such as corn, wheat and soybeans are substantive to both skin and hair.

When applied to the skin, these proteins penetrate the outer layers of the stratum corneum to provide hydrating benefits while forming a film that minimises trans-epidermal water loss (TEWL).

Hydrolyzed proteins have also been shown to reduce irritation caused by surfactants typically used in shampoos and cleansers.

These hydrolyzed proteins derived from wheat, corn and soybeans, which combined can enhance moisturisation and conditioning properties of a wide variety of skin care and hair care applications, in addition to, providing film forming and anti-irritant benefits to leave skin and hair hydrated and healthy.

[Data on file.](#)

PANTHENOL

- Metabolises in the skin to form Pantothenic Acid.
- Is a deep penetration moisturiser.
- Stimulates cell proliferation.
- Promotes minor wound healing.
- Acts as an anti-inflammatory agent.
- Is effective in treating acute sunburn.

<https://www.ncbi.nlm.nih.gov/pubmed/21982351>

TOCOPHEROL

Tocopherol or Vitamin E is an important fat-soluble antioxidant and has been in use for more than 50 years in dermatology. It is an important ingredient in many cosmetic products. It protects the skin from various deleterious effects due to solar radiation by acting as a free-radical scavenger.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4976416/>

VACCINIUM VITIS-IDAEA FRUIT EXTRACT

Vaccinium Vitis-Idaea Fruit Extract is a natural active ingredient obtained from plant stem cells using an environmentally friendly biotechnological process that provides a higher level of efficacy. Vaccinium Vitis-Idaea is able to repair and protect skin against the oxidative damage caused by solar radiations such as UV and IR-A, improving skin's antioxidant activity, reducing wrinkles and spots, and improving moisturisation, firmness and elasticity. The result is skin with a young and healthy appearance, which is more resilient against sun damage.



35%
reduction in the
number of wrinkles



13%
reduction in
wrinkle volume



18%
reduction in
subepidermal low-
echogenic band (SLEB)



24%
increase in SLEB
density



13%
increase in skin
moisturisation



44%
reduction in cellular
oxidative stress

[Data on file.](#)

PALMITOYL TRIPEPTIDE-1

The various forms of peptides act upon collagen found in the body and particularly skin. The most abundant form of collagen in the body is type collagen I, the collagen primarily responsible for repairing your skin. Collagen III is found alongside collagen I and works much in the same way, though it is not as tough as collagen I. Palmitoyl tripeptide – 1 mimics the relationship between the growth factors involved in the skin's healing process and the production of collagen. Essentially, palmitoyl tripeptide tricks your skin into producing more collagen to repair your skin, improve elasticity and minimize the appearance of fine lines and wrinkles. Palmitoyl tripeptide – 1 is a powerful skin-care ingredient to combat aging, but like most skin-care ingredients it works more effectively when used in combination with

other antiaging peptide ingredients. When used as part of a good skin-care routine, palmitoyl tripeptide – 1 can help skin repair damage by stimulating collagen production. The results is younger, smoother and stronger skin.

<https://www.mdpi.com/2079-9284/4/2/16/html>

PALMITOYL TETRAPEPTIDE-7

Palmitoyl tetrapeptide-7 (It was also formerly known and marketed as palmitoyl tetrapeptide-3. Palmitoyl tetrapeptide-7 consists of a short chain of four amino acids (a.k.a. GQPR peptide or glycineglutamineproline-arginine) connected to palmitic acid. Palmitic acid is a fatty acid added to improve the peptide's oil solubility and thus skin penetration. Palmitoyl tetrapeptide-7 serves as an anti-inflammatory after exposure to UVB-irradiation. In vivo reflectance confocal microscopy studies indicated that a blend of palmitoyl oligopeptide and palmitoyl tetrapeptide-7 enhanced the extracellular matrix structure compared to placebo. Sixty healthy photoaged volunteers were tested over 12 months with a formulation containing palmitoyl tetrapeptide-7. A reduction of facial wrinkles was documented by this long-term use.

Palmitoyl Tetrapeptide-7 used in conjunction with Palmitoyl-Oligopeptide. They can boost the growth of the connective tissues and naturally increasing the production of collagen in the skin; when the production of collagen is increased, the skin can heal and rejuvenate itself.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4950680/>

