# Clinical Evidence



PRODUCT, DESCRIPTION AND EVIDENCE REFERENCE: FS3-43-1 PUBLISH DATE: 20/03/2023

# R+

A powerful and highly effective serum containing 1% Retinol, a stabilised form of Vitamin A derivative, which helps to increase cell turnover. R+ will also help minimize pores and reduce the appearance of fine lines and pigmentation, resulting in firmer, younger and more even-looking skin.

#### **KEY BENEFITS**

- Contains 1% retinol to support cellular renewal.
- Lipid-encapsulated retinol for increased stability.
- Improves the appearance of fine lines and wrinkles.
- Reduces appearance of age spots.
- Supports the formation of collagen and elastin.
- Helps protect collagen breakdown in the skin.
- · Provides long-lasting skin moisturisation.

### **DIRECTIONS FOR USE**

Use as directed by your skincare specialist. Use at night time only. Please observe the listed warnings when using this product.

#### WARNINGS

For external use only. Avoid contact with eyes. If this occurs wash affected area thoroughly with water. If irritation occurs, discontinue use. Store this product below 40°C.

#### **INGREDIENTS**

Aqua, Caprylic/Capric Triglyceride, Glycerin, Silybum Marianum Ethyl Ester, Saccharide Isomerate, Acrylates/C10-30 Alkyl Acrylate Crosspolymer, Phospholipids, Retinol, Phenoxyethanol, Sodium Gluconate, Tocopherol, Parfum, Sodium Hydroxide, Helianthus Annuus Seed Oil, Benzoic Acid, Dehydroacetic Acid, Citric Acid, Sodium Citrate, Alpha-Isomethyl Ionone, Benzyl Salicylate, Hydroxycitronellal, Linalool.

## **ACTIVE INGREDIENTS**

Silybum Marianum Ethyl Ester 2% Saccharide Isomerate 1.5% Retinol 1% Tocopherol 0.5%

#### SILYBUM MARIANUM ETHYL ESTER

Silybum marianum, a milk thistle extract is a potent source of flavonolignans have been found to exhibit anti-collagenase and anti-elastase activity, two enzymes which can destroy the elasticity and firmness of the skin. Inhibition of these could help to protect the skin and prolong the appearance of a more youthful glow. <a href="https://pubmed.ncbi.nlm.nih.gov/30875758/">https://pubmed.ncbi.nlm.nih.gov/30875758/</a>

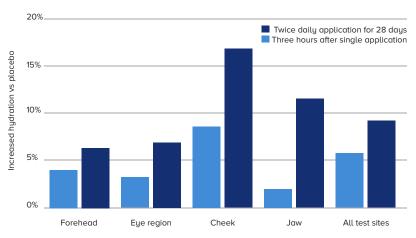
# SACCHARIDE ISOMERATE

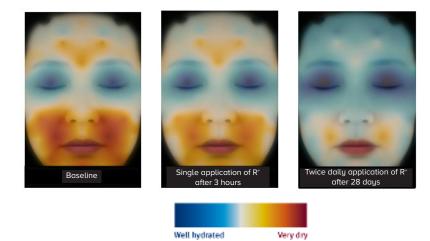
Saccharide Isomerate Complex is a 100% plant-derived carbohydrate complex, similar to that found in human skin. The molecules bind to the skin, preventing epidermal water loss, delivering immediate & long-lasting hydration for up to 72 hours<sub>4</sub>. As a vegan hyaluronic acid booster, Saccharide Isomerate complex contains no animal by-products, so you can be confident that R<sup>+</sup> is cruelty-free and highly efficacious<sub>4</sub>.

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  $R^+$  was applied twice per day<sub>4</sub>.

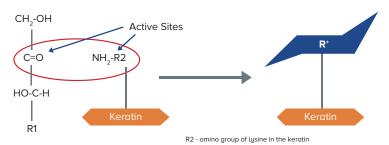
#### Saccharide Isomerate vs. Placebo

After twice daily application of  $R^+$ , 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.

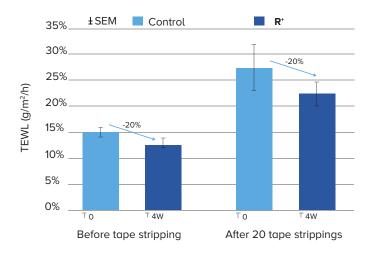




The in-vivo and in-vitro studies have proven the unique binding of this Saccharide Isomerate Complex to te free amino group of lysine in keratin. After 4 weeks of continuous use, R<sup>+</sup> improves the signs of dry skin by 20%, with effects lasting long after the final application 6 days later. This binding function allows the Saccharide Isomerate Complex to connect with the top layer of the skin, locking in moisture<sub>s</sub>.

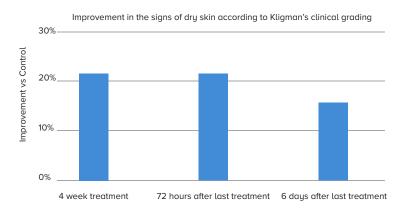


Saccharide Isomerate Complex in an aqueous solution improves and strengthens the skin barrier functionas shown by the 20% reduction intrans-epidermal water loss before and after 20 successive tape strips after a 28-day application<sub>4</sub>.



After 4 weeks of continuous use, R<sup>+</sup> improves the signs of dry skin by 20%, with effects lasting long after the final application 6 days later.

- 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



#### **PHOSPHOLIPIDS**

Phospholipids occur naturally within the human body and can be derived from plant sources. Phospholipids can help to reduce the effects of photo-aging and extrinsic stress on the skin.

Data on file.

#### **RETINOL**

Retinol is a precursor of retinoic acid and is an effective anti-aging treatment widely used in cosmetic medicine and is classed as part of the group of topical vitamin A based drugs called retinoids. Retinoids are widely studied and have been shown to reduce fine lines and wrinkles by increasing the production of collagen. They also stimulate the production of new blood vessels in the skin, which improves skin colour. Additional benefits include fading age spots and softening rough patches of skin. Topical application of retinol significantly affects both cellular and molecular properties of the epidermis and dermis. Tretinoin, under the brand name Retin-A, was the first retinoid. It was used as an acne treatment in the 1970s, but researchers later discovered that it also fades actinic keratosis spots, evens pigmentation, and speeds the turnover of superficial skin cells.

Vitamin A and its derivatives are among the most effective substances slowing the aging process. Retinoids regulate the cell apoptosis, differentiation and proliferation. Anti-wrinkle properties of retinoids promote keratinocyte proliferation, strengthen the protective function of the epidermis, restrain trans epidermal water loss, protect collagen against degradation and inhibit metalloproteinases activity.

https://www.ncbi.nlm.nih.gov/pubmed/26578346 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6791161/

#### **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. One of the most well-known and researched antioxidants for the body and for skin. Vitamin E occurs naturally in human skin, but can become depleted due to constant environmental exposure in the absence of sun protection. There are eight basic forms of the entire fat soluble vitamin E molecule, which are either synthetically or naturally derived. The most typical forms are d-alphatocopherol, dalphatocopherol acetate, dl-alpha tocopherol, and dlalpha tocopherol acetate. Research has shown that natural forms of vitamin E are more effective than their synthetic counterparts, but both definitely have antioxidant activity. 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. Experimental studies suggest that vitamin E has photoprotective properties and is a powerful antioxidant

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

#### HELIANTHUS ANNUUS SEED OIL

Rich in nutrients such as calcium, iron, magnesium, zinc and vitamins A, K and E, it's used effectively against inflammation and general irritations of the skin. Being very high in vitamin E, it acts as an emollient which traps moisture and keeps skin well hydrated. It also helps prevent damage to cells by ultraviolet light and aids against premature aging of skin by protecting the collagen and elastin content. Helianthus Annuus Seed is a source for betacarotene which is converted to vitamin A with benefits of protection from sun damage and free radicals. Omega-6 (linoleic acid) which is found in Helianthus Annuus Seed oil, assists with cell development and treating disorders such

as eczema, acne and scarring.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5622016/