

Soliance - Biolift + Immediate tensor active

INCI China - Ecocert approved



Givaudan

engage your senses



Summary

Introduction	3
Skin contour and elasticity	3
Biolift + is a β -lactoglobulin solution.....	3
Biolift + origin	3
Biolift + structure	4
Mechanism of action	5
Tests immediate lifting effect.....	5
Characteristics	7
Cosmetic uses	7
Conclusion	8

Introduction

Skin is the most visible part of our body, the interaction with others. It reflects our age and our health. Therefore, it should look as young and healthy as possible.

The skin is subject to many environmental factors such as UV and pollution, or intrinsic factors such as hormonal imbalance, stress or tiredness. All these stimuli have incidence on the skin appearance. The complexion is less glowing, the tone is lost, and the skin begins to sag.

Nowadays, the importance of appearance, particularly the face skin, makes cosmetic products more and more valuable. Because our

life is always getting harder and because time is more and more precious, cosmetic products are expected to be efficient and to have fast visible results.

Soliance has developed an immediate lifting active that tenses the skin in few hours, in order to respond to the consumer's need: efficacy and rapidity of action.

Skin contour and elasticity

Whether due to age, weight gain or water retention, skin may slacken. The facial contour appears heavy.

Physiological and photo-induced aging degrades the biodynamic properties of the skin - elasticity, firmness, and tonicity. Extrinsic factors such as UV or pollution may damage the skin components leading to loss of mechanical properties. Synthesis of elastin and collagen fibers decreases, resulting in the dermal

extracellular matrix unbalance. The skin becomes thinner and loses its elasticity. It may get a sagging appearance, and wrinkles become deeper at the surface of the skin.

The skin around the eyes is thinner and more sensitive than the rest of the face. It is constantly in movement: blinking, squinting, wincing... The epidermis shows rapidly signs of aging and tiredness such as crow's feet. This face area requires special care.

Biolift + is a β -lactoglobulin solution Biolift + origin

Milk as a symbol of life and nutrition, has been used for skin care for ages. For example, Cleopatra used to take some bath made of milk. It has often been associated with eternal youth. This natural product rich in proteins, sugars and vitamins can bring many benefits to the organism by oral or topic way. Today, its protein fractions can be used for nutritive, firming and energizing activities.

Biolift + acts on the biodynamic characteristics of the skin. It is an exceptional cosmetic active designed to lift the skin. It helps to minimize the apparent loss of firmness, to restore a radiant, youthful beauty. This natural ingredient,

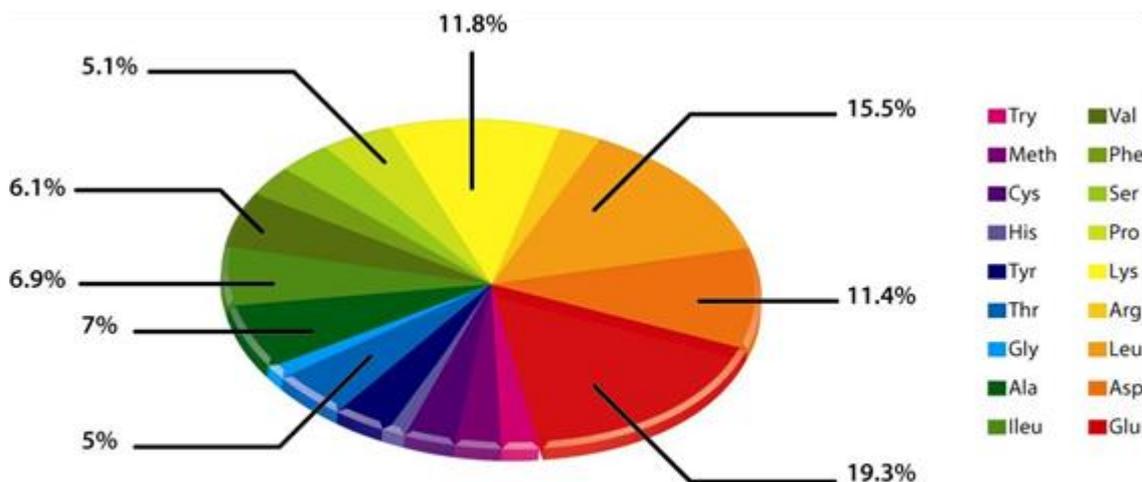
scientifically isolated, promotes immediate and continuous benefits to effectively boost firmness of the surface layer of the skin.

Biolift + is a simple and efficient cosmetic active ingredient elaborated from milk. The specific extraction technology leads to the fractionation of the different components of milk. During the production process, protein fraction of β -Lactoglobulin is isolated, separated and purified. Biolift + is a solution of β -lactoglobulin at 12.5%. β -lactoglobulin is a milk albumin, extracted from lactoserum and filtered under sterile conditions.

Biolift + structure

β -lactoglobulin is composed of 162 amino acids. Among them, 27 are acid and 20 are alkaline.

It is particularly rich in Lysine and Cysteine.



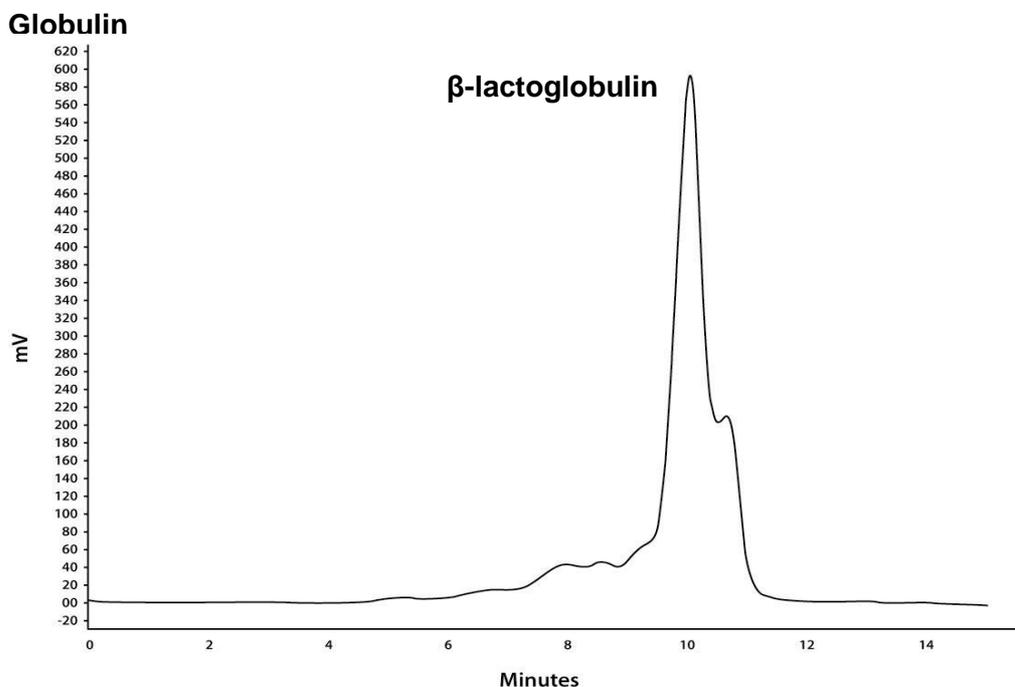
Amino acid profile

The -SH part is free and helps to form chemical complexes through polymerisation, with itself or with other proteins (such as α -lactoglobulin).

When solubilized at 1%, its absorption at 280 nm is 9.5.

Its 3D- structure is very organized: 10% is present under helix form, 30% under β - sheets. Specific zones are hydrophobic or hydrophilic.

Chromatography of Biolift + on a C18 column (water/acetonitrile 60%, detection at 280 nm) shows the β -lactoglobulin separation with a purity superior to 77%.



Biolift + is soluble in aqueous phase at every pH even at its pHi (5.2). β -lactoglobulin is not sensitive to very low temperature.

Its thermostability shows that β -lactoglobulin denaturates at 50/55°C.

Mechanism of action

β -lactoglobulin shows binding, gelling and polymerizing properties that make it a good tensor agent. These proteins form a network at the surface of the skin, that minimize the skin micro-depressions.

The tensor, smoothing and film-forming properties of Biolift + result from a surface mechanical effect.

The skin is smoothed.

It helps to minimize the apparent loss of firmness, to restore a radiant, youthful beauty. This natural ingredient, promotes immediate and continuous benefits to effectively boost firmness of the surface layer of the skin.

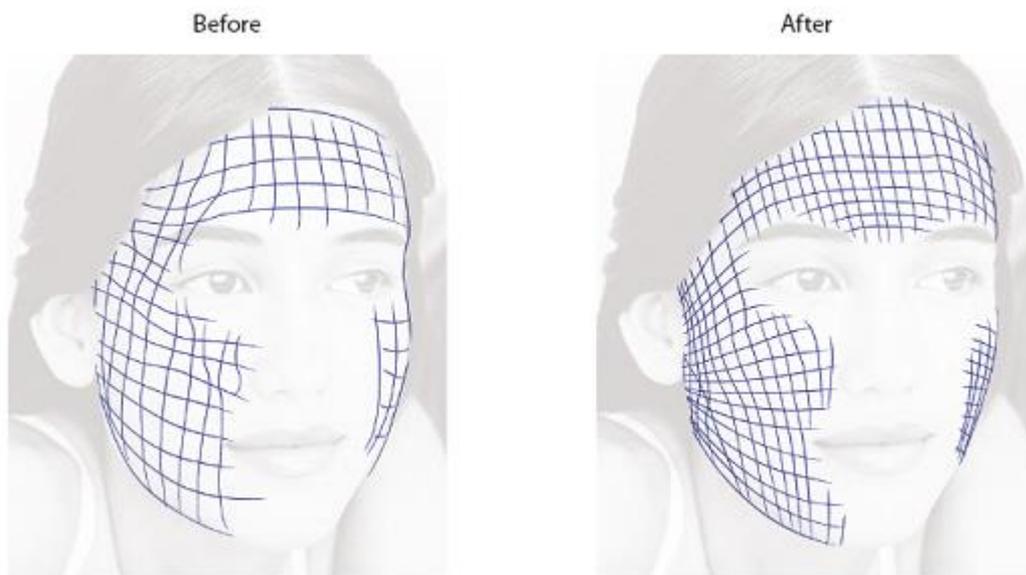


Figure 1: Mechanism of action of Biolift +

The skin tone is improved. Biolift + is particularly efficient on specific zones

such as crow's feet, lip contour cheek and forehead.

Tests immediate lifting effect

Tensor effect

In vivo test

Proteins are known to have tensor effect, such as egg white. The lifting action is purely mechanical: the proteins form a network that retracts and stresses the skin.

Objective

Evaluate the tensor effect of Biolift +.

Strategy

Observe and measure an elastin mask treated or not with the product, then dried.

Protocol

An elastin mask (polymoist mask, Sidobre-Sinnova) is used. Bands 21 x 0.5 cm are cut and completely soaked with the tested solutions. The bands are suspended with a 2 g weight.

Evaluation & Analysis

After drying, the length of each band is measured.

The tensor effect is calculated with the following formule:

Band 1 length – band 3 length / Band 1 length – band 2 length

Results

Band	Detail	Length (cm)
Band 1	Control (distilled water)	21.2
Band 2	BSA (reference) 110g protein/L	18.0
Band 3	Biolift + 83g protein/L	18.2

The tensor effect of Biolift + is almost similar to the reference (BSA).

When calculated with regard to the protein quantity, results are equivalent for Biolift + and BSA.

Biolift + is a super potent tensor active, equivalent to BSA.

Lifting effect *In vivo* test

Proteins are known to have tensor effect. The lifting action is purely mechanical: the proteins form a network that retracts and stresses the skin.

Objective

Assess the immediate lifting effect of Biolift +.

Strategy

Visualize through an *in vivo* test the tensor effect of Biolift +, thanks to visiometer.

Protocol

The study has been carried out on five volunteer females from 42 to 49 years old. All the volunteers have crow's feet.

The volunteers come without any product applied on the skin. A print is realized with silicone before and after use of the product on the crow's.

The print is then enlightened with oblique light and observed with a videomicroscope.

The tested product is Biolift + at 15% in solution.

Evaluation & Analysis

The used device is a videomicroscope with mobile lens and optic fibre coupled with acquiring image computer. The lens (x25) is put in front of the skin without any contact.

The picture is taken with 16 million colours and saved.

The product effect is analyzed by the person in charge of the study.

Results

Before application



Figure 2 : The crow's feet is clearly visible for all volunteers

Just after application



Figure 3: The crow's feet is still clearly visible but blurs.

After 4 hours



Figure 4: The crow's feet is less visible. The fine line's depth decreases

The skin looks more tensed and younger. Fine lines disappear

Characteristics

INCI name: Water (and) Milk protein

Recommended dosage:

Biolift + can be incorporated in any kind of skin care formulation, its incorporation level depending on the expected tensor effect:

- at high concentration (up to 15%) for an extra-firming cosmetic product
- at lower concentration (from 4%) in face contour creams or body milk to bring the surface effect in the firming or restructuring activity.

Preservative: None (Sterile product)

Aspect: Slightly opalescent liquid

Color: Pale yellow

Odor: Characteristic

Cosmetic uses

Biolift + has proved its immediate tensor effect.

Biolift + helps to:

- diminish the appearance of fine lines and depth of wrinkle
- restore visible tone and suppleness of the skin surface
- minimize the apparent effects of environmental aggressions such as pollution, sun, stress

It may be included in anti-pollution products for a complementary effect.

Conclusion

Biolift + is a perfect tensor agent permitting to minimize the skin microdepressions.

With Biolift +, make the wrinkles disappear.