



CitroBio®
Brazilian Biodiversity

LIFTALIZE

CitroBio's New Botox-Like!

Vegan • Water-Soluble • Easy to Formulate

Discover the Secret of Natural Youth

The skin is our largest organ and one of the first to show signs of aging, requiring special care to maintain its firmness and vitality. For this reason, anti-aging claims have become a pillar in facial care today.

Filler claims have seen a notable increase of five percentage points in the last five years, showing how brands are seeking to differentiate their anti-aging claims.

Through scientific advances and observing nature in search of its biomimicry, CitroBio has developed a new ingredient that takes us down new paths in cosmetology with the aim of finding youth lived in a healthy and natural way.

LIFTALIZE is the ingredient that provides a new form of integration between man and nature.



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Nature Technology

LIFTALIZE is a **plant-based** active ingredient, sustainably obtained from a flower typical of the northern region of Brazil, commonly used in traditional cuisine, known as Jambu.

Rich in bioactives such as alkaloids, **especially spilanthol**, popularly known for its **anesthetic and tingling properties**, it penetrates through the stratum corneum, reaching the dermis, thus causing systemic circulation leading to the activation of cell renewal and skin regeneration in addition to the tensor effect, bringing support and vitality.



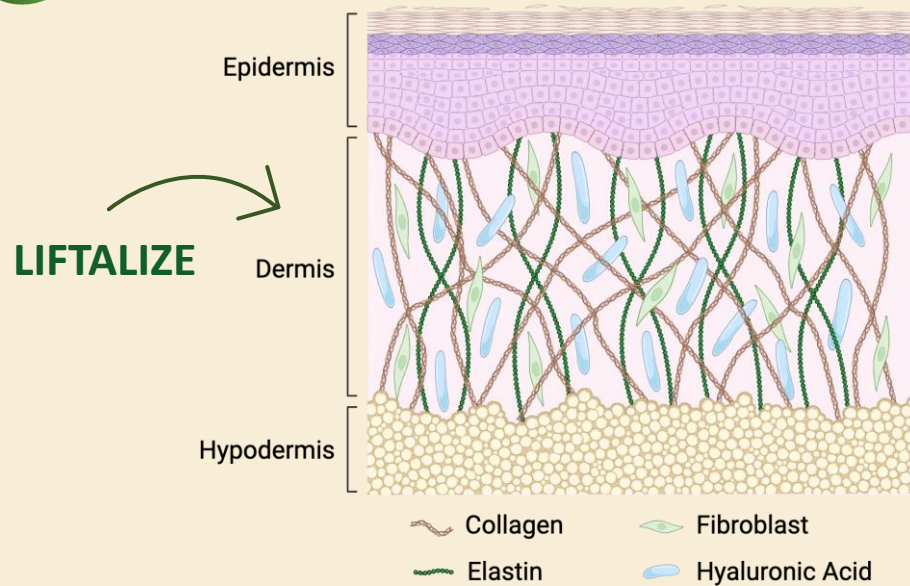


Natural and Sustainable

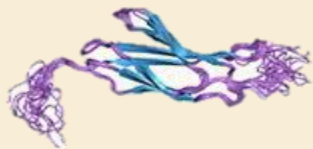
LIFTALIZE is an active ingredient extracted in a **100% sustainable manner**, using no water in its production process, preserving nature and its natural resources.

In addition, the plant is cultivated in CitroBio's own areas and also in those of partners in the Amazon region, **enriching communities, reducing impacts and stimulating a sustainable ecosystem** for the development of products and people.

Mechanism of Action



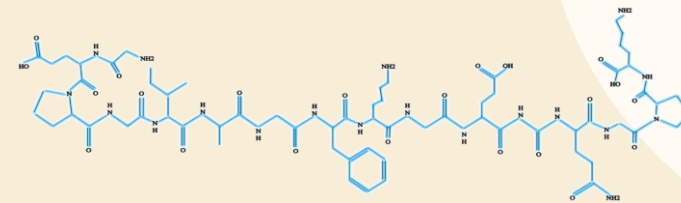
Tenascins are a family of extracellular membrane (ECM) glycoproteins that play a role in cell migration and movement. Tenascin-X interacts with collagen fibrils, leading to improved connective tissue integrity.



The epidermis has the function of forming a protective barrier for our body. It has 3 main sub-layers:

- **Basal layer**
- **Stratum Corneum**
- **Stratum Spinosum**

The dermis is the main layer of the skin, as it guarantees all the skin's resistance and elasticity. It is composed of the extracellular matrix, which is a network of fibrous proteins and glycoproteins that produce important compounds for our skin from fibroblasts.



Type I collagen is the most abundant in the human body and the main component of the skin's structure. It is one of the components responsible for maintaining the skin's firmness.

Collagen changes and deficiencies contribute to the formation of wrinkles, both in photoaged skin and in naturally aged skin. The most obvious effects are loss of firmness, radiance and wrinkles. To mitigate these effects, LIFTALIZE acts directly on the extracellular matrix of the dermis:

- **Inducing the synthesis of type I collagen – an important protein that prevents the appearance of wrinkles and expression lines.**
- **Inducing the synthesis of Tenascin-X, an extracellular matrix glycoprotein that structures the dermal framework, improving the structural integrity of the skin.**

Liftalize innovates by acting quickly to lift the facial contour, promoting the lifting effect through non-invasive collagen synthesis and activation of tenascin-X.

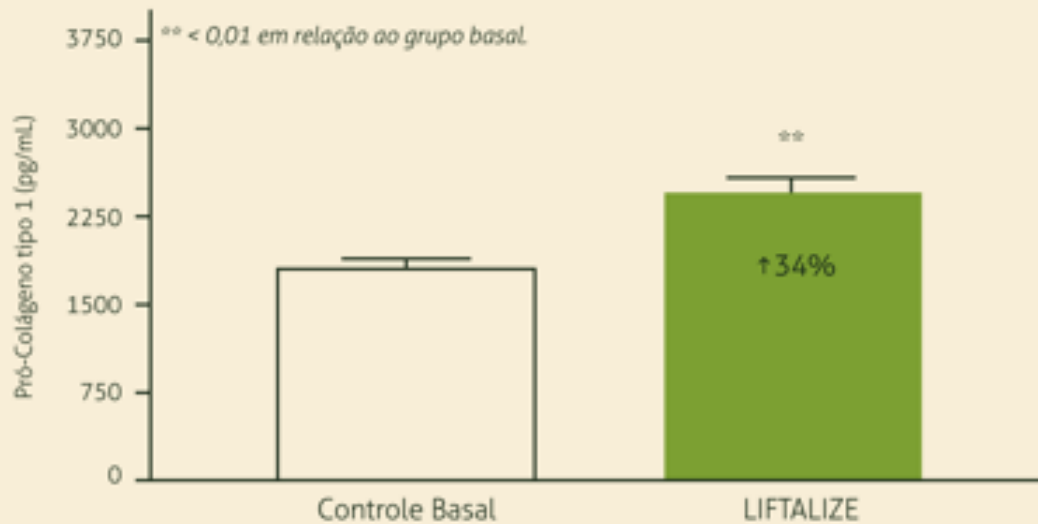
Table 1. Comparison of the properties and activities of spilanthol and botox

Spilanthol	Botulinum toxin
Substance of plant origin	Substance produced by the bacterium <i>Clostridium botulinum</i>
Safe	Toxic
Slight wrinkle smoothing effect	Instant and strong wrinkle smoothing effect
Topical use	Invasive
Applied by the user himself	Applied through a medical procedure performed under specialist supervision
Low to moderate cost	High cost
Safe for pregnant and lactating women	Prohibited for use by pregnant and breastfeeding women
No side effects	Possible side effects: - Swelling and bruising at the injection site; - Redness and dryness of the skin; - Localized pain, muscle tremors

Efficacy Tests

LIFTALIZE – Synthesis of Pro-Collagen Type I

Semi-Immunoenzymatic Quantification (Elisa) of Type I Collagen synthesis in ex vivo human skin culture treated with **LIFTALIZE 2%***



34% more induction of Type I Collagen synthesis in the extracellular matrix in just 4 days!

Supported Claims:

- Anti-aging;
- Improves skin firmness and support;
- Increases skin collagen.

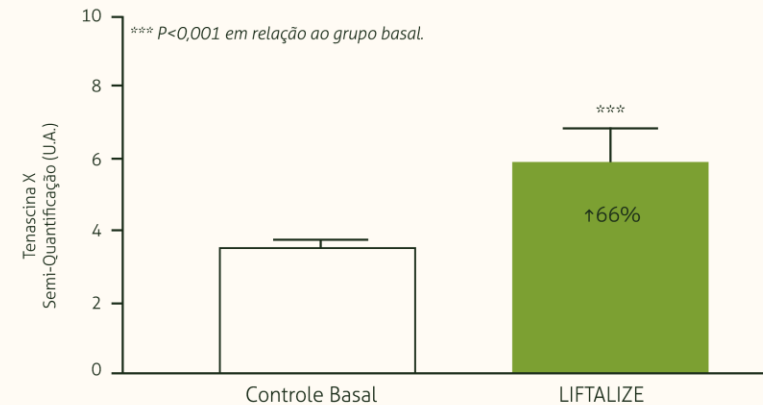
*Liftalize tested at 2% in its own culture medium, therefore it presents real values of its effectiveness.

LIFTALIZE – Synthesis of Tenascin - X

Semi-quantification of Tenascin-X synthesis, by fluorescence imaging emitted by immunostaining, in ex vivo human skin culture treated with **LIFTALIZE 2%***

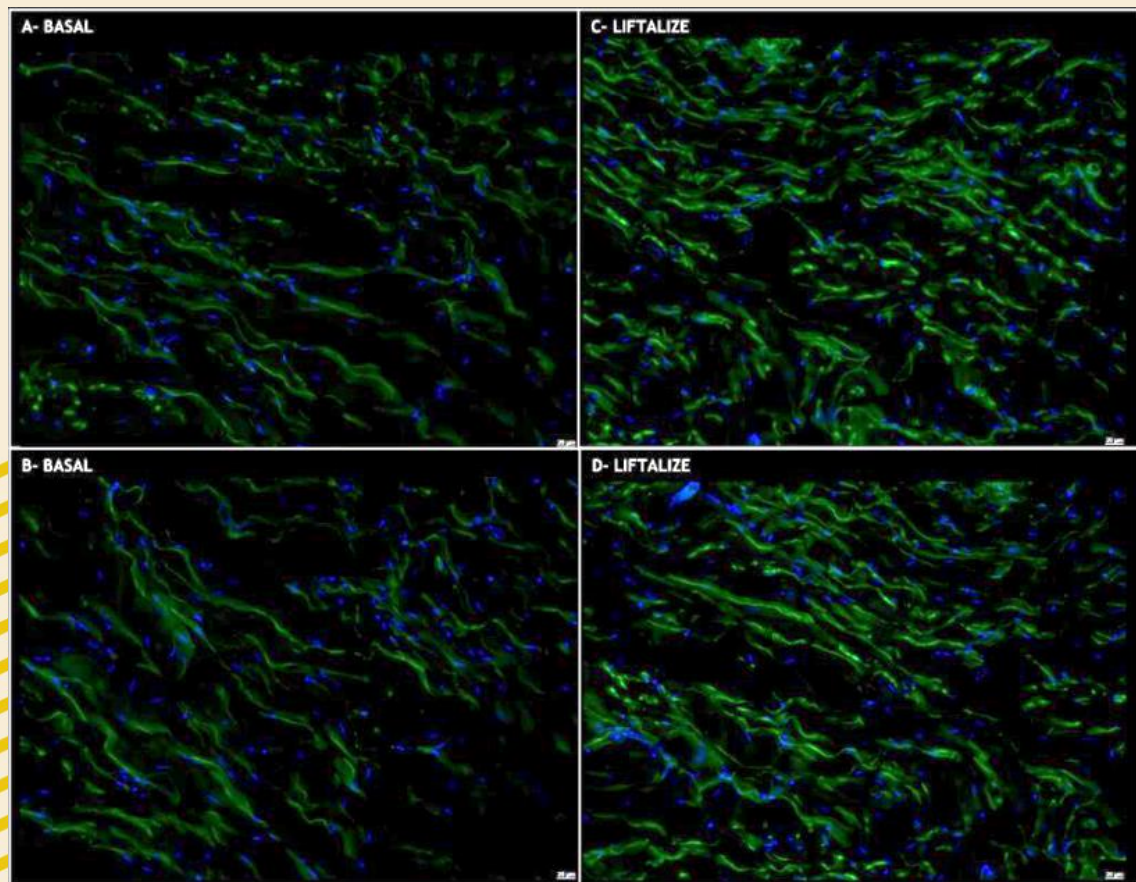
66% more induction of Tenascin-X synthesis in the extracellular matrix, in just 4 days!

*Liftalize tested at 2% in its own culture medium, therefore it presents real values of its effectiveness.



LIFTALIZE – Synthesis of Tenascin - X

Semi-quantification of Tenascin-X synthesis, by fluorescence imaging emitted by immunostaining, in ex vivo human skin culture treated with LIFTALIZE 2% - 4 days



Liftalize induces:

- Strengthening of the extracellular matrix;
- Improvement of skin strength, resistance and elasticity;
- Improvement of the skin structure;
- Support and upkeep of collagen fibers;
- Dermal restructuring.

*Semi-quantification of Tenascin-X

*Image obtained at 20x magnification

*Liftalize tested at 2% in its own culture medium, therefore presenting real values of its effectiveness.

Application Forms

Facial Contour Lotion



Phase	Ingredient	% w/w
A	Water	q.s.p
A	Glycerin	1.0
A	Sodium Gluconate	0.10
A	HydroxyEthylCellulose	0.50
A	LIFTALIZE (Spilanthes Acmella Flower Extract, Glycerine, Alcohol)	2.0
B	Glyceryl Stearate	2.0
B	Dicaprylyl Carbonate	4.0
B	EPIN'DERM (Bisabolol, Maurita flexuosa fruit oil)	1.0
B	Vitamin E	1.0
C	Preservative	q.s
D	Zea Mays (Corn) Starch	0.5

Procedure:

- Weigh the ingredients of Phase A and homogenize under gentle agitation.
- Weigh the ingredients of Phase B and heat to 75° C under slow agitation. Homogenize under the previous phase with agitation at 800 rpm for 5 minutes.
- Add phase C to the system and homogenize under agitation at 800 rpm for 5 minutes, and then add phase D.
- Adjust pH (5.0 – 6.0.)

Indications - LIFTALIZE

Liftalize

INCI Name: *Spilanthes acmella* flower extract, glycerin, alcohol

Recommended Dose: 1.0 – 3.0%

Solubility: Water-soluble

Applications: Products focused on treating and preventing skin aging and strengthening the extracellular matrix.

Treatment Creams

Eye Cream

Facial Serum

Micellar Water

Moisturizing Mask

Cleansing Gel

Intimate Formulations

Lip Products

Oral Pain Relievers



COSMOS
APPROVED

COSMOS Approved
China Compliant
Vegan
Water-free
Easy to formulate
Eco-friendly
Cruelty-free





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Thank you!

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