



CitroBio®
Brazilian Biodiversity



Epin'Derm

by Citróleo

Plant-based active that reactivates natural processes for skin integrity

Natural Technology

Exclusive β -High Response technology of Epin'Derm stimulates fibroblast and keratinocyte activity while preserving extracellular matrix integrity and skin appearance.

Its natural bioactives reactivate the skin's protective processes, restoring elasticity and firmness, improving texture and non-invasively filling expression lines. It also stimulates the production of collagen and elastin, essential fibers for skin support.

Why choose Epin'Derm over products already on the market?

The answer is simple! As it is a 100% natural active, it has no side effects and is a sustainable alternative to synthetic actives. In addition, it acts safely on the dermis. Epin'Derm provides well-being for the body and the environment.

Its β -High Response botanical complex enables the different skin cells to resume their protection and conservation processes, through their complementary mechanisms of action.

It maintains the water levels (also promoted by hyaluronic acid) of the skin through the fortification of the stratum corneum and has calming activity.



CAS Number:
23089-26-1, 394239-67-9

Code:
PA3294

INCI Name (CTFA):
Bisabolol, Mauritia flexuosa fruit oil

Color:
Reddish

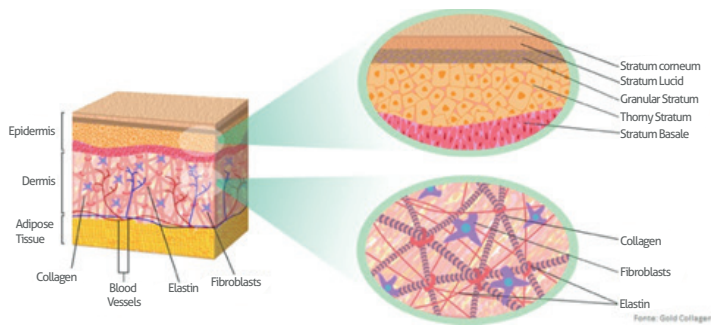
Odor:
Characteristic

Solubility:
Insoluble in water

Appearance:
Oily Liquid



Mechanism of action



β -High Response Mechanism: instant action on the main layers of the skin

Firmness and Elasticity: Increased synthesis and polymerization of collagen and elastin fibers

Hydration: Water retention in the dermis and epidermis

Effects on signs of aging: Greater volume of dermal extracellular matrix secretion and organization of collagen and elastin fibers

Skin Barrier Protection: Formation of a soothing film on the epidermis, in addition to strengthening the skin barrier to prevent water loss.

Performance Retinol-Like

Epin'Derm restores the health of the surface layer of the skin, through a soothing and protective process.



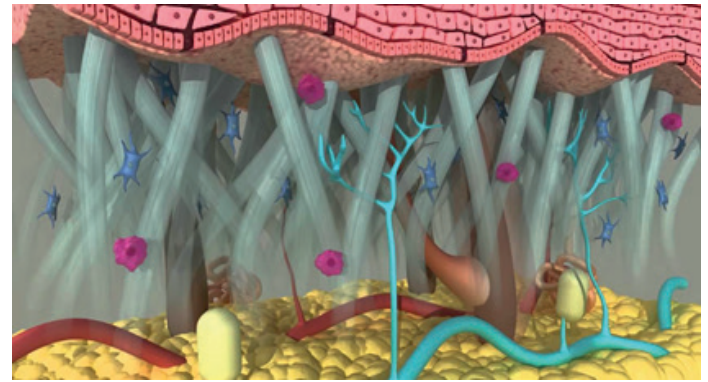
EPIDERMIS – Keratinocytes

Inflammaging - Treats post-procedure inflammatory signs bringing relief and decreasing redness.

Hydric Balance - Formation of a protective film that prevents water loss (43%) for up to 8 hours.

Strengthens the skin barrier preventing and treating against external agents.

Epin'Derm keeps the skin 32% more protected in the first 2 hours of application. Its action is deep and non-invasive.



DERMIS - Fibroblasts

Collagen

Elastin

9% firmer and 10% stronger skin in the 1st application

Hydration

Like hyaluronic acid, Epin'Derm maintains prolonged skin hydration for up to 12 hours

Extracellular Matrix

Improves skin texture and appearance

Reduction of apparent wrinkles

15% smoother and healthier skin

Non-invasive fading of deep wrinkles (13%)

Performance

Epin'Derm for sensitive skin

The main factor responsible for dryness, peeling, and in more severe cases, dermatitis, may be related to the loss of water from the hydrolipidic film, called transepidermal water loss.

Epin'Derm has polyunsaturated fatty acids that act in the recovery of skins with physical and emotional damage. Its reversing ability treats loss of firmness, reduced levels of collagen and elastin, considerably improving the appearance of the skin.

- Increased proliferation of fibroblasts
- Fortifies the stratum corneum
- Strengthens the skin barrier
- Protects the skin with a non-sticky film
- Forms a blockage against external pollutants and toxins

Dermatological medical evaluation of Clinical Signs and Feelings of Discomfort

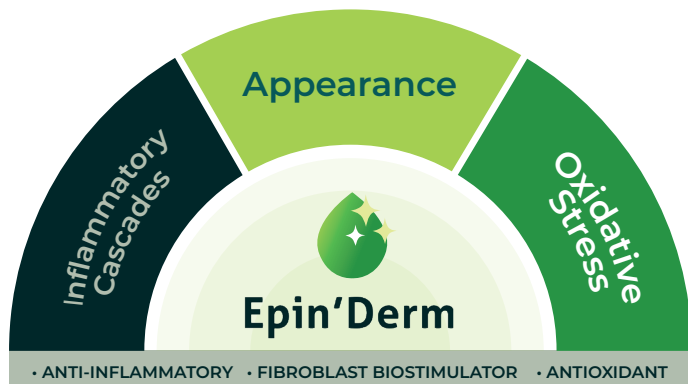
Participants	33
Protocol	Cutometry
Age	34-65
Phototype	II-IV
Gender	Female
Use	30 days

No participant reported feelings of discomfort and no clinical signs were detected after 30 days of Epin'Derm use.

Safe use: It can be used by consumers of dermocosmetics of all ages, in addition to favoring all parts of the body. Epin'Derm provides a treatment to improve the healthy appearance of the skin. β -High Response technology acts safely on the epidermis and dermis. And completely, Epin'Derm has no side effects or contraindications, which increases the perception of self-esteem, confidence and, therefore, well-being.

Exclusive action of the β -High Response mechanism

Soothing treatment with antioxidant functions – photoaging & inflammaging



The phytochemical profile of β -High Response mechanism allows **Epin'Derm** to be a multifunctional product, with complementary mechanisms of action.

Epin'Derm acts on the main factors of skin aging: inflammation and oxidative stress.

These two processes are triggered by external processes such as sun, pollution and smoking and internal ones such as anxiety and unbalanced diet.

In addition to acting on free radicals, Epin'Derm also blocks the arachidonic acid cascade, decreasing the formation of prostaglandins.

Corneometry Hydration - Skin Barrier Protection

Participants	20
Protocol	Corneometry
Age	34-65
Phototype	II-IV
Gender	Female

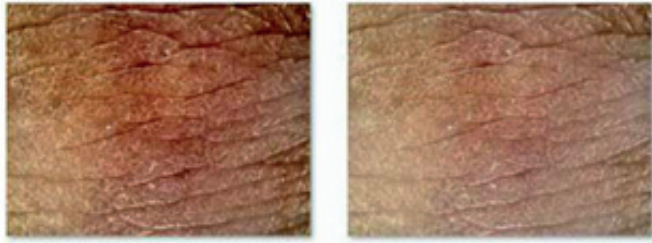
Methodology: assessment of water in the stratum corneum by Corneometry and assessment of the flux of water evaporation through the stratum corneum by TEWL. Film-forming products are those that prevent transepidermal water loss.

3% of Epin'Derm

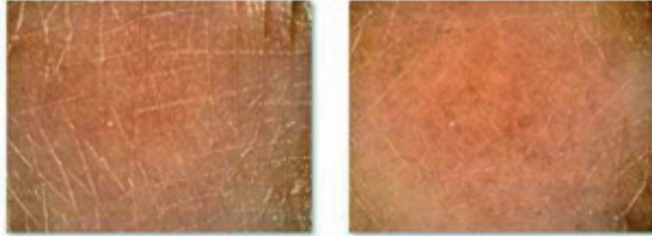


Visual Improvement of Skin Texture/Morphology

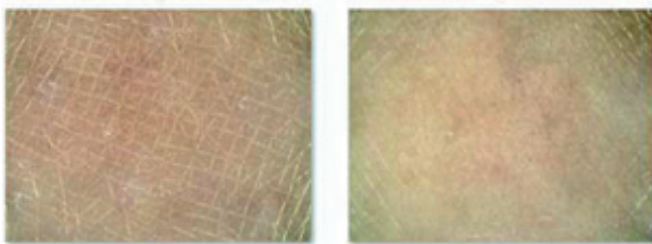
Participants	25
Protocol	Cutometry
Age	34-65
Phototype	II-IV
Gender	Female
Use	30 days



Participant 37 years old / Phototype IV



Participant 65 years old / Phototype III

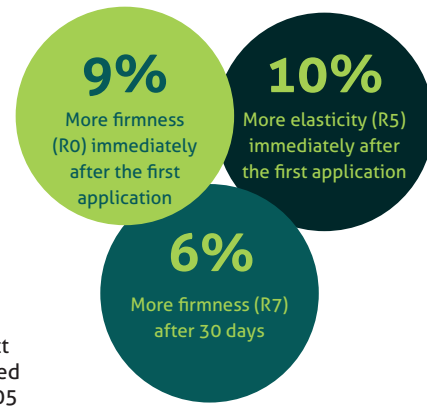


Participant 34 years old / Phototype III

The effects of **β-High Response mechanism** on the dermis and epidermis become visible in just 30 days. The strengthened barrier leads to a reversal of skin stress, caused by the faster lifestyle and even the use of mask.

Firmness and Elasticity – Epin'Derm's tensor effect

Participants	25
Protocol	Cutometry
Age	34-65
Phototype	II-IV
Gender	Female
Use	30 days



Immediate Lifting Effect in all analyzed aspect $p < 0,05$

Evaluation of the Post-depilatory Soothing Effect by Colorimetry

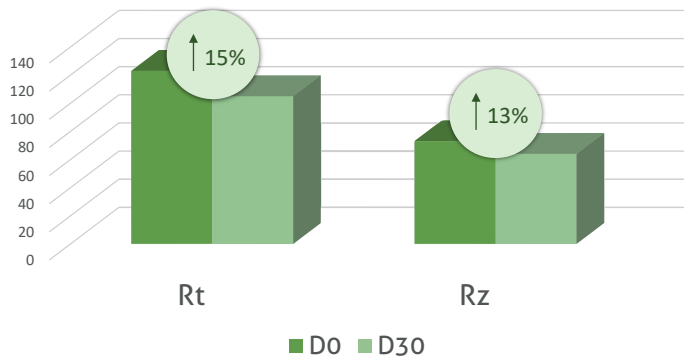
Participants	20
Protocol	Colorimetry
Age	21-45
Phototype	II-III
Gender	Female
Use	30 days

Epin'Derm reduces redness by 9% after cosmetic treatments, such as waxing, in just 30 minutes. The combined mechanism of action of **Epin'Derm**, which fortifies the skin, also softens the aggression of chemical procedures such as peelings, laser and exfoliation. Sun exposure is undoubtedly the main external aspect of skin aging, often generating irreversible changes. **Epin'Derm** protects the skin from the most severe effects of photoexposure, retaining the hydrolipidic composition, reversing free radical damage, calming the skin on application, with a decrease in redness by 14%.

Evaluation of Subjective Clinical Efficacy - Healthy and Uniform Skin

Participants	20
Protocol	Software Image Pro Premier
Age	21-45
Phototype	II-III
Gender	Female
Use	30 days

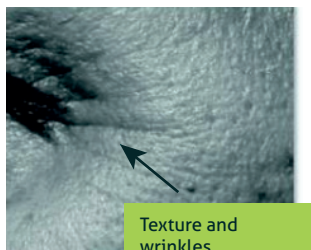
Improvement in skin Roughness and Wrinkles Depth



Epin'Derm promotes smoother, more even skin.

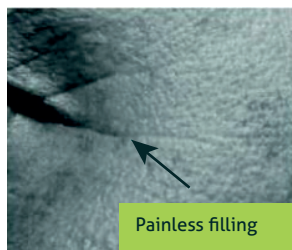
Evaluation of Anti-Wrinkle Efficacy by Image Analysis

Participants	33
Protocol	Software Image Pro Premier
Age	34-65
Phototype	II-IV
Gender	Female
Use	30 days



Texture and wrinkles

59-year-old participant
Phototype III



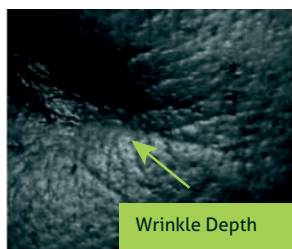
Painless filling

49-year-old participant
Phototype II



Suitable for young people 60+ and in menopause

61-year-old participant
Phototype III



Wrinkle Depth

52-year-old participant
Phototype II

Evaluation of Subjective Clinical Efficacy

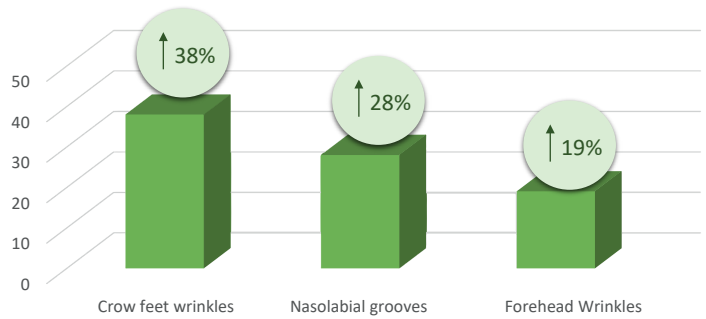
Participants	33
Protocol	Software Image Pro Premier
Age	34-65
Phototype	II-IV
Gender	Female
Use	30 days

Regions studied:

- Crow's foot wrinkles
- Nasolabial grooves
- Wrinkles on the forehead

Main areas of concern with the appearance of wrinkles for **well-being** and **self-confidence**.

Improved appearance of wrinkles



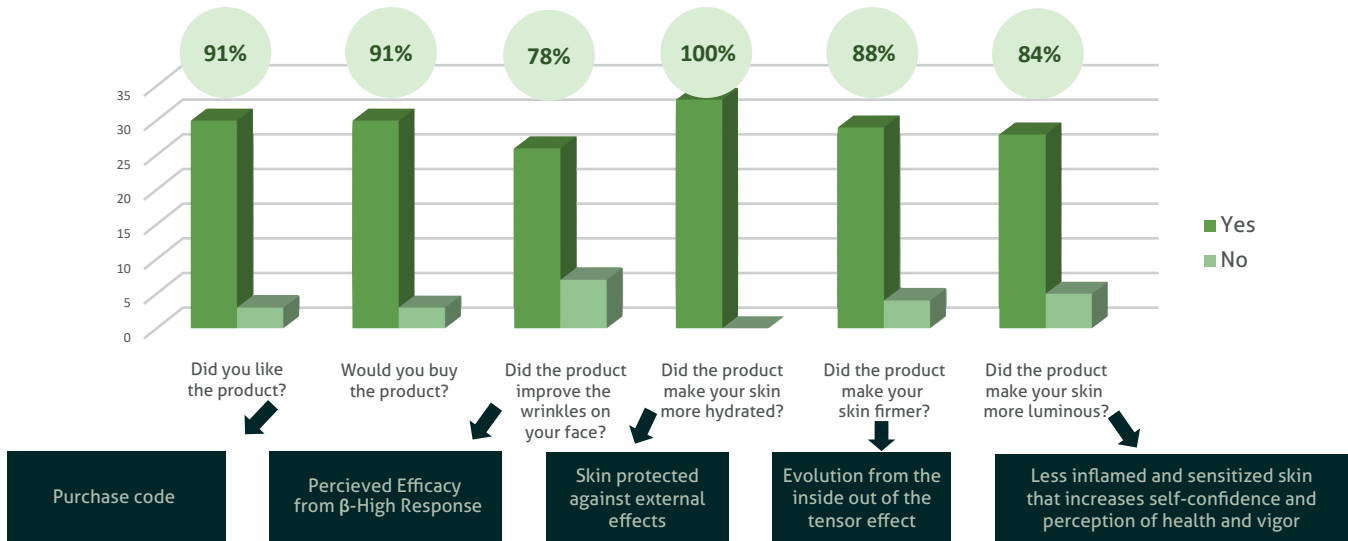
Area exposed by the mask

MGreater number of online meetings: **Greater self-perception** of face characteristics



Cosmetic Appreciability

How did consumers feel when using Epin'Derm?



Indications and Recommendations

Recommended Dose: 0,75% - 3%

Recommended pH: 3-10

Solubility: Fat soluble

Formulation: Apply to the oil phase before emulsification or at the end of the formulation process and directly into anhydrous formulas.

Applications: Skin care for sensitive and reactive skin, positive aging, urban skin care; face serum, beauty mask, makeup, anhydrous formula, natural product.

More than an anti-aging active, a **true ally of natural beauty** that needs to accompany all our phases, **without limitations** and in a **democratic way, without gender**.

Dermatologically tested

China Compliant

Vegan

Non-animal testing

Chemical-free

Preservative-free

Self-preserved

