

Immortelle Oil Pro Substantiated Extract



At a Glance I Immortelle Oil Pro - A Timeless Elixir for Even & Firm Skin

The sense of beauty changes over time and with different cultural backgrounds. A toned body contour with smooth and firm skin, however, continues to be a desirable goal for many beauty consumers. While skin imperfections, like stretch marks, do not cause medical problems, they can significantly impact a person's confidence and body image, hence, ultimately influencing the quality of life. Cosmetic strategies to improve skin firmness and the appearance of stretch marks include the inhibition of collagen and elastin degradation, enhanced microcirculation and anti-inflammatory activity, which helps to reduce redness in affected skin areas.

Lipoid Kosmetik makes use of the skin matriximproving properties of the golden Immortelle flower and creates Immortelle Oil Pro, a COSMOS-certified, triglyceride-based extract for body care.

The lipophilic active components support skin matrix strengthening and elasticity, leading to an improved appearance of stretch marks and skin firmness. As an oil-based extract, Immortelle Oil Pro is well suited for products that can be massaged into the skin. The mechanic stimulation additionally supports dermal fiber renewal and makes skin appear smoother. Taken together, Immortelle Oil Pro is the luxurious addition to massage and body care applications targeting a perfected body contour with even and firm skin.

ACTIVE INGREDIENTS

- Organic immortelle flower extract
- Bioactive, lipophilic compounds (inhibition of collagen & elastin degradation and anti-inflammatory activity)

PROVEN EFFICACY

in vivo

- Gain in skin strength and texture
- Reduced stretch mark size & visibility
- Enhanced consumer confidence

USER BENEFITS

- Reduction of stretch mark appearance
- Increase of skin firmness
- Enhancement of skin evenness & smoothness
- Perfection of body contour

Product Details

Immortelle Oil Pro is a caprylic/capric triglyceride extract from organic immortelle flower (Helichrysum angustifolium, Asteraceae), preservative-free/self-preserving. COSMOScertified, activity-proven extract belonging to the Herbasol® Pro line



Firm Skin Without Stretch Marks – A Major Body Care Topic

Uneven, sagging skin or stretch marks are harmless and do not cause any medical issues. They are, however, a cosmetic concern for many people. Stretch marks can impact a person's self-esteem and body image leading people to feel unconfident especially in social situations where they might be on display. Hence, a loose body contour, uneven, sagging skin and stretch marks are a common problem with a direct influence on the quality of life of affected people. This creates a huge demand in the cosmetic industry to develop products that help with improving the appearance of stretch marks and uneven skin.

According to a Mintel database search, the number of products launched addressing skin firmness, stretch marks, skin evenness or body contouring has been on the rise over the last five years (see Fig. 1). In the category beauty and personal care and the subcategory body care, 2030 products addressing skin firmness, 965 products addressing the term stretch marks, 2171 products addressing even skin, and 220 products addressing the term body contour, have been launched between 2018 and 2022. Interestingly, 50-70 % of these products come in an oil- or emulsion-based format.



Fig. 1: Uneven skin with stretch marks and a loose body contour are cosmetic concerns with a huge impact in the body care sector. Stretch marks or loose skin can have a lasting psychological, or emotional impact on affected people. Hence, it is not surprising that the body care products addressing these cosmetic claims have been launched in an increasing number over the last 5 years. Interestingly, many of these new product launches came in an oil- or emulsion-based texture making them well suited for body care applications. The data was generated using Mintel's Global New Products Database Search in the category 'Beauty and Personal Care' and the subcategory 'Body Care'. Time period of the data comparison: 2018-2022.

Stretch Marks - The Ordinary Rupture of Dermal Fibers

Stretch marks are indented streaks that can affect the abdomen, buttocks, thighs, back, breasts, axillae, and groin area of the body [1]. They develop when skin is overstretched, e.g., through rapid weight gain, growth or medical conditions. This stretching causes the collagen and elastin fibers in the dermis layer of the skin to tear, resulting in the formation of stretch marks with a veiny or branched pattern. In the earliest stage, stretch marks often look reddish as the rupture of connective tissue allows deeper layers of the skin with blood vessels to show through. Gradually, stretch marks fade as soon as broken connective tissue is replaced by newly synthesized collagen. While the color of the

stretch marks changes from red to pale white, making them less noticeable, the new connective tissue lacks structure. Replaced collagen fibrils are disorganized with prominent spaces between collagen bundles, which causes the appearance of irregular skin texture and scar formation [2, 3, 4].

Stretch marks are a quite common phenomenon and generally anyone can get them. However, due to differences in the genetic makeup or specific circumstances, women are more prone to developing stretch marks, e.g., up to 80 % of women get them during pregnancy.





Fig. 2: Stretch marks develop upon overstretching of collagen and elastin fibers in the skin. A smooth skin surface is characterized by regularly organized collagen and elastin fibers. Once this regular arrangement is disturbed upon skin overstretching, stretch marks with an irregular skin texture form on the surface of the skin.

The Body Care Secret to Improve Stretch Marks & Skin Firmness

It is important to note that stretch marks cannot be eliminated; but there are cosmetic strategies to reinforce dermal connective tissue to improve the appearance of stretch marks and enhance skin evenness and firmness:

- Inhibition of the degradation of elastic fiber tissue (collagen and elastin) to improve skin matrix strength and elasticity.
- Mechanical stimulation through massaging the affected body areas increases microcirculation in the tissue, which stimulates collagen production, reduces swelling, and improves skin elasticity.
- Reducing redness and inflammation in pale streaks to make them less visible.

The combination of massage and a body care product with skin matrix-strengthening activity is therefore the optimal approach to make stretch marks less noticeable, improve skin firmness and evenness, and refine the body contour ^[5, 6].

Immortelle Oil - The Golden Essence for Body Care

Immortelle oil, also known as Helichrysum essential oil or Everlasting oil, is derived from the flowers of the *Helichrysum italicum* (syn. *angustifolium*) plant, a small shrub native to the Mediterranean region. The name of the genus Helichrysum is derived from the Greek words 'helios' (for sun) and 'chryos' (for gold), both refer to the bright yellow color of the flowers. In addition to its prominent flower color, the plant is known for a strong curry-like smell. Immortelle has gained popularity in cosmetic applications due to its numerous beneficial properties for the skin. Its essential oil has a long traditional use in wound healing, hematoma and scars, and has been successfully shown to aid in scar formation and dermal regeneration after cosmetic surgery [7].

Recently, Immortelle oil has been discovered to inhibit collagenase and elastase *in vitro*, two enzymes that degrade collagen and elastin in the skin. As the strength and elasticity of the skin matrix is directly connected to the skin's resiliency to overstretching, the inhibition of these enzymes may contribute to improving the appearance of stretch marks and overall skin firmness ^[8]. In addition, Immortelle was shown to exhibit anti-inflammatory activity, which may contribute to the reduction of stretch mark redness ^[9].

Taken together, Immortelle oil is a versatile and beneficial ingredient in particular for precious body care, offering a range of advantages for skin firmness, evenness, and stretch marks applications.



Fig. 2: Immortelle, the golden source for body care grown under the Mediterranean sun. The flowers of Helichrysum italicum have been used for centuries in traditional medicine and skin care. Due to their skin matrix improving and anti-inflammatory properties, Immortelle is the ideal ingredient for body care applications targeting firm and even skin including improved stretch mark appearance.

Mode of Action | The Luxurious Ingredient for Skin Firmness & Perfection

Lipoid Kosmetik makes use of the skin matrix-improving properties of the Immortelle flower and creates Immortelle Oil Pro, a COSMOS-certified, triglyceride-based Herbasol® Pro extract. The raw material grows wild in a privileged natural ecosystem in Spain, providing optimal conditions for the highest product quality. The lipophilic active components of Immortelle Oil

Pro support skin matrix strengthening and elasticity, leading to an improved appearance of stretch marks and skin firmness. As an oil-based extract, it is ideal to be incorporated into products that can be massaged into the skin, which additionally stimulates dermal fiber renewal. Taken together, Immortelle Oil Pro is ideal for body care applications targeting a perfected body silhouette with firm and even skin.



Active Lipophilic Components

- Traditional Mediterranean plant Helichrysum italicum
- The best of Immortelle is hidden in its lipophilic fraction
- Immortelle Oil Pro is a lipophilic extract perfectly suited for oil-based massage and body care applications



Improvement of Skin Matrix & Elasticity

- Reduction of collagen and elastin degradation
- · Strenghtening of dermal fibers & elasticity
- Enhanced skin microcirculation through mechanic stimulation
- Anti-inflammatory activity to reduce redness of stretch marks



Perfect Fit For Precious Body Care

- · Improvement of stretch mark appearance
- Increase of skin firmness
- · Enhancement of skin evenness & smoothness
- · Perfection of body contour

Fig. 4: Immortelle Oil Pro — A Timeless Elixir for Even & Firm Skin. Immortelle Oil Pro is an activity-proven extract that incorporates the lipophilic active compounds of the Mediterranean everlasting Immortelle flower Helichrysum italicum for skin firming and stretch mark improving body care applications. The oily texture makes it especially suited for the incorporation into products that can be massaged into the skin, which is why Immortelle Oil Pro is the perfect addition to target firm, even skin and a refined body silhouette.

Objective

To study the efficacy of Immortelle Oil Pro in improving the appearance of stretch marks, skin firmness and evenness with three approaches:

- Instrumental assessment.
- Clinical evaluation by a dermatologist.
- Self-assessment to evaluate consumer opinion about product effectiveness, product preference and psychological impact.

Technique

20 volunteers treated their stretch mark area (buttocks and thighs) with a basic oil containing 2 % Immortelle Oil Pro for 90 days. Measurements and self-assessments were performed at day 30 and 90.

- Instrumental assessment: product efficacy was evaluated by monitoring the 3D microstructure and extensions of individual stretch marks using a Fringe projection system Primos CR®.
- Clinical assessment: product efficacy was demonstrated by dermatological scoring of skin matrix-related parameters.
- Self-assessment: consumers answered a questionnaire related to stretch mark visibility, skin relief, well-being, and self-confidence.

Study Details

Design	Investigator-blinded, randomized, comparative half-side in vivo test
Test Panel	20 female volunteers, aged 18-48 years, with stretch marks on the measurement area (buttocks and thighs)
Test Substances	Basic oil with 2 % Immortelle Oil Pro versus untreated skin
Application Frequency	Twice daily (morning, evening) to one half side
Endpoints	 Instrumental assessment of skin roughness and stretch mark length. Clinical evaluation of skin matrix-related parameters. Self-assessment: Questionnaire rating statements related to product efficacy, product persuasion, and quality of life.

Result | Instrumental Assessment of Skin Texture and Stretch Mark Parameters

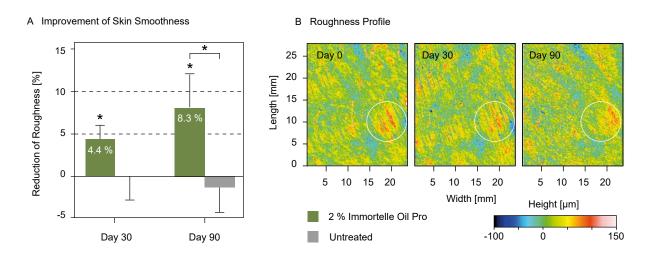


Fig. 5: Immortelle Oil Pro improves skin texture. 20 women applied a basic oil with 2 % Immortelle Oil Pro to a stretch mark area for 90 days. Another stretch mark area was left untreated. (A) Skin roughness is significantly reduced after 30 and 90 days of treatment. (B) Representative images of a stretch mark area. Data and images were recorded with a Primos CR° . N = 20; Mean + SEM. Wilcoxon signed ranks test vs. day 0 and untreated; * = p < 0.05.

A Improvement of Stretch Mark Visiblity Day 0 Day 30 Day 90 Day 30 Day 90 Day 30 Day 90 Untreated

Fig. 6: Immortelle Oil Pro improves the appearance of stretch marks. 20 women applied a basic oil with 2 % Immortelle Oil Pro to a stretch mark area for 90 days. Another stretch mark area was left untreated. (A) Stretch mark length is significantly reduced after 30 and 90 days of treatment. (B) Representative images of a stretch mark area on buttock/ thigh at day 0, 30 and 90. Data was recorded with a Primos CR° . N = 20; Mean + SEM. Wilcoxon signed ranks test vs. day 0 and untreated; * = p < 0.05. Images were taken under studio-quality xenon lightening with an IntelliStudio photography stand.

Immortelle Oil Pro makes skin more even, uniform and smooth. Immortelle Oil Pro reduces the size and visibility of stretch marks.

Result | Clinical Evaluation of Skin Matrix Parameters

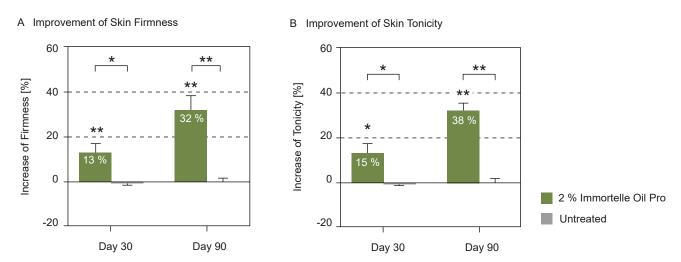


Fig. 7: Immortelle Oil Pro improves the clinical signs of skin matrix strength and tension. 20 women applied a basic oil with 2 % Immortelle Oil Pro to a stretch mark area for 90 days. Another stretch mark area was left untreated. A dermatologist determined clinical parameters based on a grading scale (score 1-9) for firmness (A) and tonicity (B). Changes are presented as % change between day 0 and day 90. N = 20; Mean + SEM. Wilcoxon signed ranks test vs. day 0 and untreated; * = p < 0.05; ** = p < 0.01.

Immortelle Oil Pro enhances the strength and elasticity of the skin matrix. Immortelle Oil Pro makes skin firmer and more toned.

Result | Consumer Self-Assessment of Product Efficacy and Well-Being

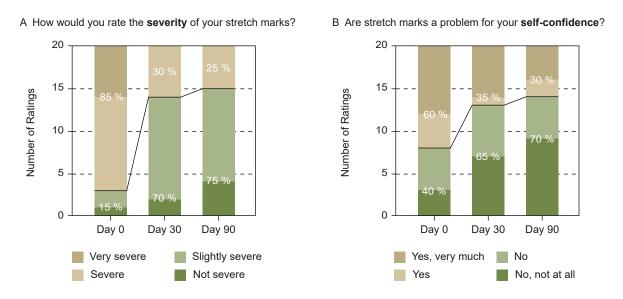


Fig. 8: Immortelle Oil Pro improves the subjective perception of stretch marks. (A, B) 20 women applied a basic oil with 2 % Immortelle Oil Pro to a stretch mark area for 90 days. Each volunteer answered a questionnaire at day 0, day 30 and day 90, rating their opinion on a scale from 0 (best condition) to 10 (worst condition). Results are presented as number of ratings between scores 0-2, 3-5, 6-8, 9-10. N = 20.

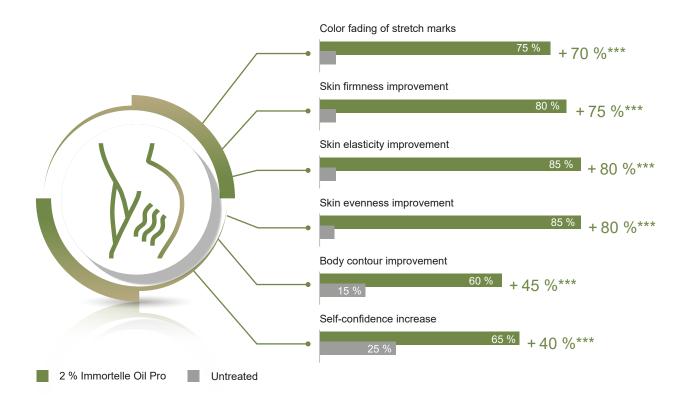


Fig. 9: Immortelle Oil Pro improves the subjective perception of skin uniformity and well-being. 20 women applied a basic oil with 2 % Immortelle Oil Pro to a stretch mark area for 90 days. Each volunteer answered a questionnaire at day 90, rating their opinion on a scale from 1 ('No'), 2 ('Rather no'), 3 ('A little'), 4 ('Yes'), to 5 ('Yes, very much'). Results are presented in % of positive answers (rating 3-5). N = 20. Statistical significance against untreated *** = p < 0.001.

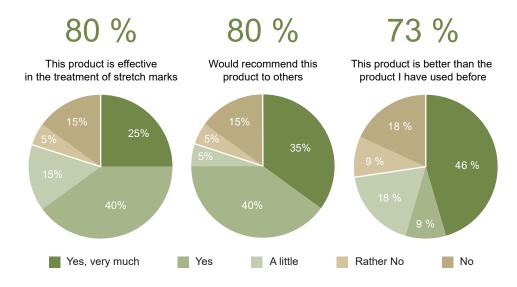


Fig. 10: Immortelle Oil Propersuades the consumer as stretch mark and body care treatment. 20 women applied a basic oil with 2 % Immortelle Oil Proto the measurement area for 90 days. Each volunteer answered a questionnaire at day 90, rating their opinion on a scale from 1 ('No'), 2 ('Rather no'), 3 ('A little'), 4 ('Yes'), to 5 ('Yes, very much'). N = 20 (left, middle), N = 11 (right).

Result

Immortelle Oil Pro improves stretch mark appearance, and makes skin firm and even. This was revealed *in vivo*, where volunteers applied a basic oil with 2 % Immortelle Oil Pro to one half of a stretch mark affected area for 90 days. The instrumental analysis revealed a significant improvement of skin smoothness by 8.3 % (Fig. 5) and stretch mark length by 6.2 % (Fig. 6), which was visibly confirmed by representative images.

Clinical evaluation by a dermatologist demonstrated significant improvements in skin firmness and tonicity already after 30 days (Fig. 7).

This fits to the consumer opinion. Before treatment, 85% rated their stretch marks as (very) severe (Fig. 8A), and 60% had an impaired self-confidence because of them (Fig. 8B). This proportion decreased to 25% and

30 %, respectively, after 90 days. Moreover, the vast majority perceived their stretch marks as less pronounced, and their skin as smoother, softer, and firmer in the end (Fig. 9). Overall, 80 % of volunteers rated the basic oil with 2 % Immortelle Oil Pro to be effective for stretch mark treatment and would recommend the product to others; 73 % felt that the product was better than alternative products (Fig. 10).

Conclusion

Immortelle Oil Pro reduces the appearance and perception of stretch marks, and improves skin texture and firmness. This improvement directly impacts well-being and self-confidence of consumers, and makes Immortelle Oil Pro the perfect ingredient for body care applications.

Immortelle Oil Pro enhances consumer confidence and quality of life.
Immortelle Oil Pro is perfectly suited for precious massage and body care applications.

References

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Product Details

Product Characteristics

- Substantiated extract that belongs to the Herbasol® Pro line.
- Caprylic/capric triglyceride extract from organic immortelle flower (Helichrysum angustifolium, Asteraceae).
- COSMOS-certified raw material. 100 % natural origin and 18.3 % organic origin.
- Preservative-free/self-preserving
- Yellow oil

Recommended Applications

- Stretch mark care
- Massage oil
- · Precious body oil

Recommended Usage

- Recommended use level: 0.5-5 %
- Final cosmetic products with Immortelle Oil Pro can be claimed as e.g., 'contains Swiss-manufactured ingredient'.

Formulation Recommendations

- Immortelle Oil Pro is a yellow oily extract, suitable for o/w and w/o emulsion. It is soluble in oils and esters, regardless of polarity. It can be added to the hot oil phase shortly before emulsification or during cold processes at any suitable step. Immortelle Oil Pro has a characteristic, curry-like odor, which is not overpowering. It can be easily covered with floral, green, or herbaceous notes. Immortelle Oil Pro has a yellow color, which is not visible in emulsion but in clear liquid formulation.
- For detailed information, please ask for our report 'stability and formulation recommendations' (info@lipoid-kosmetik.com).

Safety

- Non-irritating for skin (HRIPT, repeated human patch test), when tested at 10 % on 53 volunteers.
- Non-sensitizing for skin (HRIPT, repeated human patch test), when tested at 10 % on 53 volunteers.
- No allergens (as per current EU Cosmetic Regulation).

Sustainability - Corporate Level

- Award-winning company and top 1 % supplier according to the EcoVadis sustainability rating
- Efficient energy consumption and reduction process
- We contribute to climate protection in cooperation with myclimate and finance climate protection projects in the amount of our calculated emissions according to Scope 1/2.
- Sustainable use of biodiversity
- Green product portfolio with documented naturalness and sustainability information
- Certified according to the RSPO Supply Chain Standard, Mass Balance
- For more details, please visit the sustainability section on our website.

Sustainability - Process Level

- Sophisticated supplier/ raw material qualification system against a comprehensive set of sustainability criteria.
- Energy-efficient and environment-friendly cold process technology.
- Controlled under cosmetic GMP ISO 22716.
- Readily biodegradable product from renewable sources.
- Excellent material and waste management programs.

Sustainability - Raw Materials

Immortelle Flower

- Cultivated, GMO-free
- Organic, Sustainability Score 3/3

Caprylic/Capric Triglyceride

Plant-derived, 100 % non-GMO

Regulatory (Further regulatory documents upon request)

Origin of the plant material Spain (not part of the specification)

INCI Caprylic/Capric Triglyceride, Helichrysum Angustifolium Flower Extract

EU Cosmetic Regulation The product complies to the EU Cosmetic Regulation (EC) No 1223/2009.

China INCI/ CSAR All INCIs are listed in the current Inventory of Existing Cosmetic Ingredient China (IECIC).

CSAR Ingredient Submission Code is available.

EU REACH The product, i.e. its substances, conforms to the Regulation (EC) No 1907/2006.

China REACH All ingredients are listed in the current Inventory of Existing Chemical Substances China (IECSC).

Allergen No allergens (as per current EU Cosmetic Regulation: <10 ppm for leave-on/<100 ppm for rinse-off).

CMR The product is not known to contain substances classified as CMR under the Regulation (EC) No

1272/2008 (CLP).

ABS The product complies with the requirements of Access and Benefit Sharing (ABS) as derived from

the Nagoya Protocol.

COSMOS Immortelle Oil Pro is certified as 18.3% organic by Ecocert Greenlife according to the COSMOS

Standard. 100 % natural origin of total.

ISO 16128 The product has a Natural Origin Index (Ino) of 1.

Halal The product conforms to HALAL requirements.

Vegan The product can be used in vegan formulations.

Non-GMO The product is non-GMO. It meets the non-GMO standards set by Regulation (EC) No 1829/2003

and EC (No) 1830/2003.

Palm oil Lipoid Kosmetik is certified according to the RSPO Supply Chain Standard, Mass Balance (RSPO

certification number 7-02527-2020). The palm oil contained in this product contributes to the

production of certified sustainable palm oil.

Sustainability (Please refer to page 11 for detailed information)

Corporate Top 1 % supplier according to the EcoVadis sustainability rating.

Process Sophisticated supplier/ raw material qualification system and sustainable process

technology.

Plant Raw Material 3/3 Sustainablity Score

This product is developed and manufactured in Switzerland.

For more information: www.lipoid-kosmetik.com/en/sourcing-raw material

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