Monoi de Tahiti A.O. Natural Edelweiss is an original oily extract, combining the properties of Monoi de Tahiti with the soothing properties of the Edelweiss. It perfectly meets the modern cosmetic trends.

Manufacturing Process

- The fresh Tiare flowers, harvested at the bud stage, are put into soaking in refined coconut oil (copra) for 12 days minimum at a rate of 12 flowers/liter, and according to a specific method of «enfleurage».
- After this period, the macerate is settled for 24 hours, and it is then filtered, purified, and enriched with a natural antioxidant (solution of tocopherols) to obtain the Monoi de Tahiti Appellation of Origin.
- Monoi de Tahiti A.O. Natural Edelweiss results from the active soaking of Edelweiss in this Monoi de Tahiti, according to an elaborated process.
- The oily extract obtained is then purified by filtration, and stabilized by addition of Tocopherol.
- This product is exempt of any synthetic fragrance.
- The Monoi de Tahiti A.O. Natural Edelweiss obtained is checked before being packed in standard packaging under inert atmosphere.

Properties

1. Moisturizing (progressive and lasting)
2. Firming & Smoothing
3. Soothing
4. Protecting

Using Recommendations

- Moisturizing creams and milks, protecting milks for sensitive skin...
- Body and hair oils
- Sun products: oils, milks, gels...
- Shampoos, foaming baths, shower gels
- Protecting and restructuring butters
- Lipsticks and lip-balms
- Soaps
- Aromatherapy ingredients

Monoi de Tahiti becomes solid below 22-23°C. Place near a source of heat and the oil liquefies again.

Edelweiss is free from toxicity in the limits of our current knowledge and of the recommended cosmetic uses.
Efficiency Studies

**MOISTURIZING EFFECT**

Evaluation of the moisturizing effect

«On a panel of 15 women with 2 applications per day for 4 weeks, 54% felt that the moisturizing effect of the product was satisfactory. The sensory evaluation of the product showed that the texture is pleasant, its application is easy and that it makes the skin soft and comfortable.»

IREFC - Hôtel Dieu Clinic Marseille - Mars 1996

Comparative study of the moisturizing effect (Monoi / Shea Butter / Coconut / Jojoba / Vaseline)

«The skin’s moisture due to Monoi is progressive and lasts 4 hours after application. A moisturizing effect lasting between 6 and 8 hours after application is observed.» «In the experimental conditions, we can conclude that Monoi de Tahiti AO and refined copra oil have a good moisturizing effect.»

EVIC-CEBA Study - 28th July 1998

<table>
<thead>
<tr>
<th>Average values of corneometric index</th>
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<tr>
<th>Monoi de Tahiti</th>
<th>Shea Butter</th>
<th>Jojoba Oil</th>
<th>Coprah Oil</th>
<th>Vaseline</th>
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<td>50</td>
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<td>20</td>
<td>10</td>
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<tr>
<th>Variations of the moisturizing effect</th>
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<tr>
<td>Monoi de Tahiti</td>
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</table>

**FIRMING & SMOOTHING EFFECT**

«Under the experimental conditions, we can conclude that Monoi de Tahiti has a good firming effect while playing on the firmness and the elasticity of the skin, and has an effect on the cutaneous microrelief, by smoothing effect.»

EVIC CEBA Study - 12th May 2000

**PROTECTING EFFECT**

«Under the experimental conditions, we can conclude that Monoi de Tahiti has a good protecting effect against the environmental aggressions.»

EVIC CEBA Study - 6th December 2000

**HAIR EFFECT**

«Under the experimental conditions and taking into account the results of electronic microscopy, Monoi de Tahiti has a protecting effect on hair on 55% of the volunteers, this effect lasting 1 week after stopping the treatment on 44% of them. Subjectively, this product was appreciated by the volunteers for its beautifying and protecting effect, as well as its effect on hair shininess. It was also very appreciated for its cosmetic qualities and more specifically for its application with ease.»

EVIC CEBA Study - 25th February 2002
Monoi de Tahiti A.O. Natural Edelweiss

Technical Information

REGULATORY INFORMATION

PSC Reference: MOEDEL
INCI Name: Cocos nucifera oil, Gardenia taitensis flower, Leontopodium Alpinum flower extract, Tocopherol.
CTFA Name: Cocos nucifera (coconut) oil, Gardenia taitensis flower, Leontopodium Alpinum flower extract, Tocopherol.

<table>
<thead>
<tr>
<th></th>
<th>COCONUT OIL</th>
<th>TIARE</th>
<th>LEONTOPODIUM ALPINUM</th>
<th>TOCOPHEROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS</td>
<td>8001-31-8</td>
<td>999999-99-4</td>
<td>391900-47-3</td>
<td>39-02-9</td>
</tr>
</tbody>
</table>

Raw material approved by ECOCERT GREENLIFE, conform to the COSMOS Standard.

PHYSICAL CHARACTERISTICS

- **Aspect, 18°C**: Slightly granular paste
- **Aspect, 26°C**: Liquid
- **Colour, 18°C**: Ivory with green reflection
- **Colour, 26°C**: Yellow to yellow with green reflection
- **Odour**: Characteristic
- **Melting Point**: 24 - 26°C
- **Specific gravity, 30°C**: 0.910 - 0.929
- **Refractive index, 40°C**: 1.445 - 1.465

PACKAGING

- **5 kg**: PE-HD jerrycan
- **25 kg**: PP plastic bucket with total opening
- **190 kg**: Metallic drum with total opening and epoxyphenolic coating
- **Packaging under modified atmosphere (Nitrogen)**

STORAGE

- Store in close container.
- Store at room temperature (20 - 25°C)
- Keep away from sunlight and humidity.
- If possible, keep under nitrogen

Stability: 24 months before opening under the recommended storage conditions.

CHEMICAL CHARACTERISTICS

- **Acid value**: < 5 mg KOH/g
- **Saponification value**: 240 - 270 mg KOH/g
- **Peroxide value**: < 10 meq O₂/kg
- **Antioxidant**: Solution of natural tocopherols 0.2%

REGULATION OF USE

The Decree 92-340 strictly defines the use of «Monoi de Tahiti» brand on containers, packaging and advertising documents:

- To be called Monoi de Tahiti, the product has to contain more than 90% of Monoi de Tahiti
- Monoi de Tahiti soaps have to contain more than 30% of Monoi de Tahiti
- Monoi de Tahiti personal care products have to contain more than 0.3% of Monoi de Tahiti
- Monoi de Tahiti skin cares have to contain more than 1% of Monoi de Tahiti
- Monoi de Tahiti make-up products have to contain more than 2% of Monoi de Tahiti

The percentage of Monoi de Tahiti contained in the product and the Appellation of Origin stamp have to appear on the label.

Pacifique Sud Ingredients Z.I. Napolon / 530 avenue des Templiers - Bat 7 / 13400 Aubagne - France
Tél : + 33 (0)4.42.32.02.79 / Fax : + 33 (0)4.42.32.00.43 / info@pacificuesud.com
WWW.PACIFIQUESUD.COM

Date : 06/07/2015 - MOEDEL_FT_EN_V3
Botanical Information

**Botanical Name:**
Leontopodium alpinum

**Family:**
Asteraceae

**Morphological Type:**
Herbaceous plant

**Geographic Area:**
Mountain regions of Europe and Asia

Edelweiss also called the Star of Glaciers or the Silver Star is the most famous of all the mountain flowers. Extremely rare and fragile, we find it mainly in rocky lawns on the heights of mountains. It withstands extreme climate of this environment which combines icy cold and burning sun.

In the Tyrol, these flowers which have woolly bristle are traditionally offered in bouquet to the bride at the wedding. Edelweiss is formed by the German words «edel» which means noble and «weiss» which means white and represents purity and love.

Very popular locally, Leontopodium alpinum is used in traditional medicine for its many properties as soothing, analgesic and anti-inflammatory, as well as for treatment of abdominal pain, pharyngitis, bronchitis and diarrhea or dysentery.
Extremely rare and fragile, Edelweiss is located mainly in rocky lawns on the heights of mountains.

**Other Names**

Lion’s Foot, Silver Star, Star of Glaciers, Snow Immortal, Star Cotton, Queen of Glaciers

**Cultivation**

This flower with deciduous foliage grows in extreme climates where soils are poor and have a lot of sunshine. The flowering stalks of the Edelweiss can grow to a size of 3-20 cm. The leaves and flowers are covered with white hairs and appear woolly. The apex stalk of the Edelweiss carries a complicated inflorescence containing 5 to 10 sub-sessile flower heads, forming a flower head of flower heads. The flower head in the center of the inflorescence contains yellowish flowers in full bloom with 5 petals stuck together, forming a tube ending by 5 teeth, which classifies the Edelweiss in the group of Tubuliflores. In the center of each flower, the yellow anthers of mature stamens are joined together, forming a tube surrounding the pistil, so that the androecium (all the stamens) is described as “synanthéré”. The flower heads of the Edelweiss are surrounded by radiant bracts covered with white fuzzy hair, which make the stalks look like a silver star. This white fuzz limits evapotranspiration in dry weather and protect the plant from sudden temperature changes.

**Culture**

According to the altitude and the site the Edelweiss blooms between July and September. Its seeds are alkenes dispersed by the wind. A careful examination of the flower heads shows that they have two types of flowers: the central flowers, with a yellow and hermaphrodite appearance are male flowers (only pollen is mature) whereas the flowers on the periphery of the flower head, with filiform corolla, are female. The presence of unisexual flowers carried by a single foot associated with an entomogame pollination (flowers are pollinated by flies in 80% of cases) is the evidence of a sexual reproduction by allogamy (cross-fertilization). The seeds, are dispersed by falling to the ground.
Medicinal properties
With a very well developed defense mechanism, the Edelweiss has many properties:
- Analgesic,
- Antalgic
- Soothing,
- Anti-spasmodic,
- Anti-diarrheal,
- Anti-bacterial,
- Anti-inflammatory, thanks to flavonoids, tannins and coumarins it contains,
- Anti-oxidant,
- Anti-microbial,
- Treatment of bronchitis, pharyngitis ...

Cosmetic uses
The Edelweiss is used mainly for its anti-inflammatory and free radical scavenger in the anti-aging cream and sunscreen products...

Other uses worldwide:
- France - Switzerland: this small white flower was known for its anti-inflammatory properties and also used to treat intestinal disorders of cows and sheeps who lived in the mountains. In the Swiss Alps, we still cultivate the Edelweiss in pharmacology to integrate with anti-inflammatory or anti-diarrheal preparations. It is also used in chocolate and liqueurs.
- Japan: On the occasion of the 150th anniversary of diplomatic relations between Japan and Switzerland, the Textile Museum of St Gall presents the exhibition «Cherry Flowers & Edelweiss - the exotic is being imported» devoted to the influence exerted by Asian on the textile production in Switzerland.
Monoi de Tahiti is a soaking of Tiare flowers (Gardenia tAHITEnsis), obtained by enflleurage in coconut oil. This refined oil is obtained by hot pressure of the dried kernel extracted from the nuts. The Tiare Tahiti, French Polynesia symbol, is grown in isolated areas and must be used at the latest the day after its collection. Climatic conditions and soil quality contributes to the exceptional nature of this oily extract. Monoi de Tahiti, natural beauty product, allows to take advantage of all the virtues of Tiare. Used in traditional cosmetology, but also in Polynesian Pharmacopoeia, it relieves migraines, headaches, styes, mosquito bites... It can be used «raw», to be incorporated in cosmetic formulations, or perfumed with delicate scents of the islands, ready for application.
Monoi de Tahiti
Appellation of Origin

Monoi de Tahiti is a preparation deeply established in Polynesian beauty rituals, combining all the benefits of the purifying Tiare flower with those of the nourishing coconut oil into a silky and voluptuous oil.

**Tiare**
The Tiare flower with its sweet fragrance and beautiful white petals arranged as a star, is the emblem of Tahiti and its islands. Its jasmine perfume brings exoticism while its softness provides calm and delicacy. It is given many soothing and purifying virtues.

**Coconut**
The coconut tree has its origins in the soil of the coral islands of South Pacific. It is an integral part of local culture. It is the tree of life that feeds, protects and shelters. From the kernel of its nuts is extracted a silky and light oil with nourishing and moisturizing properties.

**Botanical Information**

**Tiare**
- **Botanical name:** Gardenia taitensis
- **Family:** Rubiaceae
- **Part of the plant used:** Fresh flower buds
- **Common names:** Tiare, Siale, Gardenia, Mahoi...

**Coconut**
- **Botanical name:** Cocos nucifera
- **Family:** Arecaceae
- **Part of the plant used:** Dried kernel of the fruit
- **Common names:** Coco, Coprah, Coconut...

**Manufacturing Process**
Monoi de Tahiti is a macerate of Tiare flowers (Gardenia taitensis) into refined coconut oil (coprah). Tiare Tahiti fresh flower buds are put in soaking into coprah oil for 12 days at a minimum concentration of 12 flowers/liter, according to a specific method of enfleurage. After this period, the macerate is settled for 24 hours. It is then filtered, purified and enriched with a natural antioxidant (solution of tocopherols).

**Quantitative Composition**
- 97.8% Cocos nucifera (coconut) oil
- 2% Gardenia taitensis flower
- 0.2% Tocopherol

**Main Components**
- Fatty acids
- Sterols (1.5 mg/kg)
- Tocopherols (approx. 1000 mg/kg)
- Volatile aromatic compounds

**Saturated / Unsaturated fatty acids**

<table>
<thead>
<tr>
<th>Fatty acids</th>
<th>%</th>
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<tbody>
<tr>
<td>Saturated</td>
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<tr>
<td>Mono-unsaturated fatty acids</td>
<td>1.7</td>
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<tr>
<td>Poly-unsaturated fatty acids</td>
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</tr>
<tr>
<td>1 : Caproic acid</td>
<td></td>
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<tr>
<td>2 : Caprylic acid</td>
<td></td>
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<tr>
<td>3 : Capric acid</td>
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<tr>
<td>4 : Lauric acid</td>
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<td>5 : Myristic acid</td>
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<td>6 : Palmitic acid</td>
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<td>7 : Stearic acid</td>
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<tr>
<td>8 : Oleic acid</td>
<td></td>
</tr>
<tr>
<td>9 : Linoleic acid</td>
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*Indicative average values*
In the 80’s, most «Monoi» on the market were fakes coming from Asia or elsewhere...
The exceptional properties of Monoi de Tahiti were officially recognized in April 1992 by the Appellation of Origin becoming a guarantee of authenticity and quality. It is «restricted to products manufactured in French Polynesia in accordance with local, loyal and constant uses by soaking of Gardenia tahitensis flowers from Polynesia, hereinafter called Tiare, in refined coconut oil» (extracted from the JORF of April 1992).

Today, the guarantee resulting from this initiative has helped to ensure that 90% of «Monoi» identified comply with the legislation in force.

The use of the term «Monoi de Tahiti» on any container, packaging, commercial documents or advertising material is strictly regulated by Decree 92-340 published in the JORF of April 2 1992 (pp. 4727-4729).

The regulation applies to both Monoi de Tahiti oil extract and butter, according to the following conditions:

- A product called Monoi de Tahiti must contain more than 90% of Monoi de Tahiti
- Monoi de Tahiti soaps must contain more than 30% of Monoi de Tahiti
- Monoi de Tahiti hygiene products must contain more than 0.3% of Monoi de Tahiti
- Monoi de Tahiti skin cares must contain more than 1% of Monoi de Tahiti
- Monoi de Tahiti makeup must contain more than 2% of Monoi de Tahiti

The label must include the percentage of Monoi de Tahiti in the product and the “Appellation d’Origine” stamp (guaranteed stamp of origin).
Evaluation of the moisturizing effect
«On a sample of 15 women with 2 applications per day for 4 weeks, 54% of test subjects considered that the moisturizing effect of the product was satisfactory. The sensory evaluation of the product shows that the texture is nice, its application is easy and leaves the skin soft and comfortable.»
IREFC - Hôtel Dieu Clinic Marseille - March 1996

Comparative study on the moisturizing effect (Monoi / Shea / Coconut / Jojoba / Vaseline)
«The hydration of the skin due to Monoi is progressive and sustained during 4 hours after application. The moisturizing effect persists 6-8 hours after application.»
«Under the experimental conditions, we can conclude that the Monoi de Tahiti AO and copra oil have a good moisturizing effect.”
EVIC-CEBA Study - July 28th, 1998

Study on the firming and smoothing effect on the cutaneous micro relief
«Under the experimental conditions, we can conclude that Monoi de Tahiti has a good firming effect while playing on the firmness and the elasticity of the skin, and has an effect on the cutaneous micro relief, by smoothing effect. »
EVIC CEBA Study - May 12th, 2000

Evaluation of cosmetic qualities
«We can conclude, under the experimental conditions adopted, that this product has softening, soothing and emollient properties. It is well tolerated by the skin and appreciated for its cosmetics qualities.»
EVIC CEBA Study - December 18th, 2000

Evaluation of the protective effect against climate aggressions
«Under the adopted experimental conditions, we can conclude that the Monoi de Tahiti has a good protective effect against environmental aggressions. »
EVIC CEBA Study - December 6th, 2000

Study on the hypoallergenicity
«Based on the results obtained from a panel of 107 volunteers and under the adopted experimental conditions, the product Monoi de Tahiti did not reveal any potential skin irritation or allergic reaction on the volunteers considered to have a sensitive skin.”
EVIC CEBA Study - February 22th, 2002

Assessment of skin tolerance and non-comedogenicity
«Monoi de Tahiti AO applied under normal conditions of use at home for 28 days by 20 voluntary adults, can be considered well tolerated in view of its skin tolerance. It can also be considered non-comedogenic.»
EUROFINS ATS Study - October 8th, 2008

*The research reports are available on request
Efficiency on hair

Study on the repair effect
«Under the adopted experimental conditions, we are led to conclude that the Monoi de Tahiti has a repairing effect on dry and damaged hair. Hair is shiny and easy to comb, 70% of the study’s volunteers were satisfied with the product.»

EVIC CEBA Study - December 4th, 1998

Study on the hair shine effect
«Under the adopted experimental conditions, given the results obtained, the treatment of natural hair locks by Monoi de Tahiti has resulted in a significant improvement in hair shine.»

EVIC CEBA Study - January 14th, 2002

Study on the antidandruff effect
«Under the adopted experimental conditions, we are led to conclude that the Monoi de Tahiti has a very slight antidandruff effect.»

EVIC CEBA Study - January 14th, 2002

Comparative study on the efficiency of the afro-American hair (Monoi / Shea / Jojoba)
«Under the adopted experimental conditions, Monoi de Tahiti has a beneficial effect on hair. Its film-forming and lubricant effect gives softness and shine to the hair, facilitates styling and protects against external aggressions. Dry or damaged hair regain vitality. Monoi seems quite suitable for repairing damaged or tired Afro-American hair.»

EVIC CEBA Study - February 22th, 2002

Evaluation of the protective effect and persistence - cosmetic qualities assessment
«Under the adopted experimental conditions, taking into account the results of electron microscopy, Monoi de Tahiti has a protective effect on the hair on 55% of the volunteers; this effect lasts 1 week after discontinuation of treatment on 44% of volunteers. Subjectively, the product was appreciated by volunteers for its beautifying and protective effect and its brightness effect on the hair. Moreover, it is well appreciated in terms of its cosmetic qualities and especially for its easy application.»

EVIC CEBA Study - February 25th, 2002

*The research reports are available on request
Studies of Indicative Formulas

Evaluation of a Monoi de Tahiti tensor serum. (28 days).
«Skin firmness increases after use.»
DERMSCAN Study - April 2002

Evaluation of a Monoi de Tahiti After Shave Balm. (28 days).
40% decrease on skin reactivity after use.»
DERMSCAN Study - April 2002

Evaluation of a Monoi de Tahiti moisturizing milk.
«The rate of skin hydration increases after use.»
DERMSCAN Study - April 2002

Evaluation of a Monoi de Tahiti hair mask
«After 21 days of treatment with a hair mask, 2 times per week, we can conclude that the product has a protective effect. »
DERMSCAN Study - April 2002

* Indicative formulas and research reports are available on request