Monoi de Tahiti A.O. Natural Lime is an oily extract coming from Polynesian tradition and combining the properties of Monoi de Tahiti with the toning properties of lime. It perfectly meets the modern cosmetic trends.

**Manufacturing Process**

- The fresh Tiare flowers, harvested at button stage, are put in soaking into refined coconut oil (coprah) for 12 days at minimum 12 flowers/liter, and according to a specific method of enflourage.
- 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 Guarantee of Origin.
- Monoi de Tahiti A.O. Natural Lime results from the active soaking of lime slices into Monoi de Tahiti according to an elaborated process with no additive.
- This gentle soaking is followed by an active extraction and is exempt of any synthetic fragrance.
- The oily extract resulting from this active operation is then purified by filtration, and stabilized by addition of a natural antioxidant (Vitamin E).

**Properties**

1. **Moisturizing (progressive and lasting)**
2. **Emollient & Softening**
3. **Stimulating**
4. **Firming & Smoothing**
5. **Purifying**

**Using Recommendations**

- Moisturizing creams, moisturizing and protecting milks
- Body and hair oils
- Suncare products: oils, milks, gels...
- Shampoos, foaming baths, shower gels
- Restructuring and protecting butters
- Sticks, 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.

The lime is widely used in food and traditional Polynesian medicines. It is free from toxicity in the limits of our current knowledge and of the recommended cosmetic uses.
Efficiency Studies

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 - March 1996

«The skin’s moisturization due to Monoi is progressive and lasts during 4 hours after application. A moisturizing effect lasting between 6 and 8 hours after application is observed.»

«Under the experimental conditions, we can conclude that Monoi de Tahiti AO and refined coprah oil have a good moisturizing effect.»

EVIC-CEBA Study - July 1998

Study of the firming and smoothing effect on skin’s microrelief

«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 - May 2000

EVALUATING THE PROTECTING EFFECT

Evaluation of the protecting effect against climatic aggressions

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

EVIC CEBA Study - December 2000

HAIR REPAIRING EFFECT

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

Etude EVIC CEBA - 4 Décembre 1998
Monoi de Tahiti A.O.
Natural Lime
Technical Information

**Monoi de Tahiti**

**Monoi de Tahiti A.O.**

**Natural Lime**

### Technical Information

**PSC REFERENCE : MOCIT**
**INCI NAME :** Cocos nucifera oil, Gardenia tahitensis flower, Citrus aurantifolia fruit extract, Tocopherol.
**CTFA NAME :** Cocos nucifera (coconut) oil, Gardenia tahitensis flower, Citrus aurantifolia fruit extract, Tocopherol.

<table>
<thead>
<tr>
<th>CAS</th>
<th>Tiare</th>
<th>Lime</th>
<th>Tocopherol</th>
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</thead>
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<tr>
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<td>999999-99-4</td>
<td>90063-52-8</td>
<td>59-02-9</td>
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<td>232-282-8</td>
<td>310-127-6</td>
<td>290-010-3</td>
<td>200-412-2</td>
</tr>
</tbody>
</table>

**CUSTOMS CODE :** 1515904000

**CAS**
- **COCONUT TIARE**
  - 8001-31-8
- **LIME**
  - 90063-52-8
- **TOCOPHEROL**
  - 59-02-9

**EINECS**
- **COCONUT TIARE**
  - 232-282-8
- **LIME**
  - 310-127-6
- **TOCOPHEROL**
  - 200-412-2

### PHYSICAL CHARACTERISTICS

- **Aspect, 18°C** : Slightly granular paste
- **Aspect, 26°C** : Liquid
- **Colour, 18°C** : Ivory
- **Colour, 26°C** : Yellow to amber
- **Odour** : Characteristic, fresh, zest scented
- **Melting point** : 24 - 26°C
- **Specific gravity, 30°C** : 0.910 - 0.929
- **Refractive index, 40°C** : 1.445 - 1.465

### CHEMICAL CHARACTERISTICS

- **Acide 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%

### 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.

### REGULATORY INFORMATION

**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% 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 care 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.

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Date : 07/11/2014 - MOCIT_FT_EN_V3
Lime, *Citrus aurantifolia*…

Citrus fruits are part of the oldest cultivated fruits. They have been cultivated in China for 2000 years. Probably coming from Southeast Asia, nowadays we can find this fruit throughout the tropics. Mainly used for its refreshing juice or for cooking, lime is rich in Vitamin C.

It is used as traditional medicine against bowel problems, hepatic troubles and fatigue. An essential oil is obtained by distillation of the bark, widely used in the food industry to flavour any type of food.
Lime
An acid fruit

Coming from Southeast Asia and Malaysia, Citrus aurantifolia is mainly cultivated in the West Indies, replacing lemon cultivation that gives very low yield under tropical climates.

**BOTANICAL DESCRIPTION**

Citrus aurantifolia is a shrub that can reach 4 to 6m high.
It develops a short trunk with a smooth, grey bark with yellowish slice. On the trunk, branches and thorny stems grow. They have a spreading and light head, with light-green foliage, usually rounded. Leaves vary in size, they are alternated, lanceolated to elliptic and veined. They develop along their axil three spines that are 6cm long. Flowering produces all year long clusters of fragrant small white to purple flowers. So the fruit production is continuous. It provides small ovoid fruits 3 to 7cm in diameter. The skin is rather thick, sticky, and green to light-yellow at ripeness. It contains a pulpy pale yellow flesh that is very acid and seedless.

**CULTIVATION**

Lime growing can be done with different methods: planting seeds, cuttings, tissue growing...
During the first year after the plantation, growth is often minimal. By providing water and nutrients, the tree will grow considerably in height and diameter, 2 to 4 years after being planted. This growth will slow when the tree has a regular fruit production. Fructification usually decreases after 20-25 years, but some trees survive and keep bearing fruit after 250 years.
**COMPOSITION**

The Citrus aurantifolia essential oil contains mainly the following aromatic molecules:
- limonene
- gamma-terpinene,
- alpha-terpineol.

**USES**

- **Medical uses**
  The leaf is considered antiseptic, astringent and diuretic, and is used in the treatment of respiratory and urinary diseases.
  The fruit pulp is rich in vitamin C and is recommended as treatment against scurvy and asthenia. An essential oil is extracted from the bark and has diaphoretic properties. It is used to treat asthenia, sores for children, and fever.
  The root is said to have diuretic properties and also to be used to relieve anxiety.
  The branches are said to possess antiemetic properties.

- **Food uses**
  The pulp and juice are particularly popular for making beverages, marmalades, flavors in candies and pastries.

- **Domestic uses**
  The wood of the lime tree is yellowish, hard with a fine grain and is used in cabinetmaking, wood-turning and marquetry.
Monoi de Tahiti is a soaking of Tiare flowers (Gardenia tahitensis), obtained by enfl eurage 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.

**CLASSIC**
- Monoi de Tahiti® A.O. Brut BHA
- Monoi de Tahiti® A.O. Brut Toco
- Monoi de Tahiti® A.O. 200 Flowers

**BUTTERS & MILKS**
- Monoi de Tahiti® Butter
- Monoi de Tahiti® Sandalwood Milk
- Monoi de Tahiti® Tiare Milk
- Monoi de Tahiti® Vanilla Milk

**FOAMING**
- Monoi de Tahiti® Soap Noodles
- Pure Monoi de Tahiti® Liquid Soap

**ORIGINAL**
- Monoi de Tahiti® A.O. 1000 Flowers
- Monoi de Tahiti® A.O. Natural Blue Ageratum
- Monoi de Tahiti® A.O. Natural Pineapple
- Monoi de Tahiti® A.O. Natural Wild Basil
- Monoi de Tahiti® A.O. Natural Cinnamon
- Monoi de Tahiti® A.O. Natural Lime
- Monoi de Tahiti® A.O. Natural Coconut
- Monoi de Tahiti® A.O. Natural Frangipani
- Monoi de Tahiti® A.O. Natural Ginger
- Monoi de Tahiti® A.O. Natural Ginger Shampoo
- Monoi de Tahiti® A.O. Natural Hibiscus
- Monoi de Tahiti® A.O. Natural Lotus Flower
- Monoi de Tahiti® A.O. Natural Nifo
- Monoi de Tahiti® A.O. Natural Grapefruit
- Monoi de Tahiti® A.O. Natural Roucou
- Monoi de Tahiti® A.O. Natural Oceanian Saffron
- Monoi de Tahiti® A.O. Natural Sandalwood
- Monoi de Tahiti® A.O. Natural Tamanu
- Monoi de Tahiti® A.O. Natural Umuhei
- Monoi de Tahiti® A.O. Natural Vanilla Beans
- Monoi de Tahiti® A.O. Natural Vetiver
- Monoi de Tahiti® A.O. Natural Ylang-Ylang
- Algomonoi Sargassum
- Algomonoi Turbinaria
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.

**OTHER NAMES**
Tiare flower oily extract

**MEETING BETWEEN TIARE AND COCONUT**

**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**

**BOTANICAL NAME :** Gardenia tahitensis  
**FAMILY :** Rubiaceae  
**PART OF THE PLANT USED :** Fresh flower buds  
**COMMON NAMES :** Tiare, Siale, Gardenia, Mahoi...

**Botanical Information**

**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 tahitensis) 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 enflèrage. 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 tahitensis 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>
</tr>
</thead>
<tbody>
<tr>
<td>Saturated</td>
<td>8.1</td>
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<tr>
<td>Mono-unsaturated fatty acids</td>
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<tr>
<td>Poly-unsaturated fatty acids</td>
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<tr>
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<tr>
<td>15:0 Capric acid</td>
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<td>18:2 Oleic acid</td>
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</tr>
<tr>
<td>18:3 Linoleic acid</td>
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</tbody>
</table>

*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

Average values of corneometric index

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