

# Beauty Care

Ingredient Book

**SEPPIC**

Ingredients that inspire



# Seppic eco-designs #BeautyTomorrow

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By your side throughout the world, Seppic imagines and develops ingredients for Active Beauty (proven benefits & attractive concepts) and for Sensorial Beauty (unique performance & creative textures), that provide cosmetic products and consumers with efficacy and emotions.





# Content

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*Active Beauty*

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# Anti-aging

## Firmness & Wrinkles

### AMBIATY EXTRACT

Aqua/Water - Glycerin -  
Vernonia Appendiculata Leaf Extract



*Anti-aging care sourced from a malagasy endemic plant*

#### Mode of action

- DEJ structuration: Collagen IV (ex-vivo: +24%), anchoring systems activation (Cytokeratin 14, Nidogen, Laminin-5, Integrin)
- Dermis activation: GAGs: +91.6% ex-vivo
- Dermis protection: MMP1 (-22%), ROS protection (+92%)
- Reduction of glycation (-37%)

#### Nature

Titrated leaf extract of Ambiaty

**Form:** liquid  
**Use level:** 0.5 to 1%  
**Preservative free**



## Firmness & Wrinkles

### HETEROSIDES

Centella Asiatica Leaf Extract



*Reinforces mature skin with multi-target approach*

#### Benefits on volunteers

- Anti-wrinkle effect: -19% vs placebo (D56)
- TEWL reduction: -8% vs placebo (D28)
- Smoothing effect: -36% vs placebo (D28)

#### Mode of action

- Reinforces the "mortar" (Ceramide-2: +44%)
- Strengthen the "brick" envelop (Involucrin, Loricrin, Filaggrin)
- Boost cell cohesion (tight junctions)
- Moisturizes (AQP3: +29%) & soothes (PGE-2, IL-8, IL-1α)

#### Nature

Highly pure heterosides from Centella

**Solubility:** water soluble  
**Form:** powder  
**Use level:** 0.2%  
**Preservative free**

## Skin remodeling

### TECA

Asiaticoside - Madecassic Acid - Asiatic Acid



*Quicker reparation of impaired skin*

#### Benefits on volunteers

- In the dermis:
- at D1 vs D0, the loss of density is significantly lower with TECA vs placebo
  - at D14, full recovery with TECA

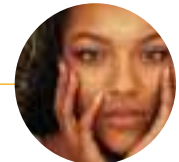
#### Mode of action

- Anti-oxidant -68%
- ECM protection (MMP-1 & 9 up to -63%)
- Dermis boosting (fibroblast migration: +61%; α-Smooth Muscle Actin protein: +50%)

#### Nature

Titrated extract of Centella asiatica  
(TECA ≥ 95%)

**Form:** powder  
**Use level:** 0.2%  
**Preservative free**





# Daily defense

## Anti-oxidant

### TECA

Asiaticoside - Madecassic Acid - Asiatic Acid



#### Faster reparation of impaired skin

##### Benefits on volunteers

In the dermis:

- At D1 vs D0, the loss of density is significantly lower with TECA vs placebo
- At D14, full recovery with TECA

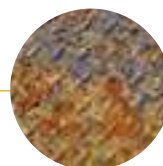
##### Mode of action

- Anti-oxidant -68%
- ECM protection (MMP-1 & 9 up to -63%)
- Dermis boosting (fibroblast migration: +61%;  $\alpha$ -Smooth Muscle Actin protein: +50%)

##### Nature

Titrated extract of *Centella asiatica* (TECA  $\geq$  95%)

**Form:** powder  
**Use level:** 0.2%  
**Preservative free**



## Detoxifying & Anti-pollution

### SAKADIKIUM™

Glycerin - Aqua/Water -  
Hedychium Coronarium Root Extract



#### Skin multiprotector

##### Benefits on volunteers

- Visible & perceived brightness increased by 16% vs placebo

##### Mode of action

- Cellular detoxification
- Anti-pollution
- Autophagy
- Anti-oxidant
- Protective effects of the immunity against urban dust: protection of langerhans cells by reducing inflammation

##### Nature

Sugars of rhizomes from Madagascar

**Solubility:** water soluble  
**Form:** liquid  
**Use level:** 3%  
**Preservative free**



## Radiance

## Skin complexion

### SAKADIKIUM™

Glycerin - Aqua/Water -  
Hedychium Coronarium Root Extract



#### Skin multiprotector

##### Benefits on volunteers

- Visible & perceived brightness increase by 16% vs placebo

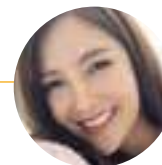
##### Mode of action

- UV, blue light, infrared protection
- Autophagy
- Anti-oxidant

##### Nature

Sugars of rhizomes from Madagascar

**Solubility:** water soluble  
**Form:** liquid  
**Use level:** 3%  
**Preservative free**



### TALADVANCE™

Glycerin - Aqua/Water -  
Centella Asiatica Leaf Extract



#### A nature-like extract of Talapetraka for skin radiance

##### Benefits on volunteers

- Instant radiance effect: increases blooming aspect & complexion uniformity after 30min at 5%
- Long term radiance effect: increases luminosity & glow after 28 days at 2%
- Improvement of skin suppleness by 11% after 28 days at 2%

##### Mode of action

- Epidermal & dermal protection: antioxidant, against inflammation (IL -1 $\alpha$ : -76% & IL -8: -34%)
- Dermal homeostasis maintenance & restoration (Chronobiology): Circadian rhythm (Bmal1: 69% & Per2: 83%; IL -8: 62%; Col1a1: 102% & Col3a1: 144%; Timp1: 48% & Timp3: 134% overnight restoration effect)

##### Nature

The full essentials of *Centella asiatica*

**Solubility:** water soluble  
**Form:** liquid  
**Use level:** 2 to 5%  
**Preservative free**

## Healthy skin



### TALADVANCE™

Glycerin - Aqua/Water -  
Centella Asiatica Leaf Extract



*The healthy skin you are looking for during day & night!*

#### Benefits on volunteers

- Instant radiance effect: increases blooming aspect & complexion uniformity after 30min at 5%
- Long term radiance effect: increases luminosity & glow after 28 days at 2%
- Improvement of skin suppleness by 11% after 28 days at 2%

#### Mode of action

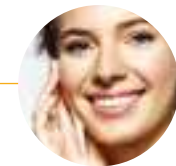
- Epidermal & dermal protection: antioxidant, against inflammation (IL -1α: -76% & IL -8: -34%)
- Dermal homeostasis maintenance & restoration (Chronobiology): Circadian rhythm (Bmal1: 69% & Per2: 83%; IL -8: 62%; Col1a1: 102% & Col3a1: 144%; Timp1: 48% & Timp3: 134% overnight restoration effect)

#### Nature

The full power of *Centella asiatica*

**Solubility:** water soluble  
**Form:** liquid  
**Use level:** 2 to 5%  
**Preservative free**

## Pore minimizer



### SUBLIGANA™

Glycerin - Aqua/Water -  
Harungana Madagascariensis Extract



*Skin protection for a flawless complexion*

#### Benefits on volunteers

- Improvement of skin texture: 37% of blackhead reduction in 28 days.
- From 7 days, pore refining perceived for up to 85% of volunteers

#### Nature

Titrated extract of *Harungana madagascariensis* tree leaves

**Solubility:** water soluble  
**Form:** liquid  
**Use level:** 2%  
**Preservative free**

## Acne prone skin & Maskne

## Skin balance



### SUBLIGANA™

Glycerin - Aqua/Water -  
Harungana Madagascariensis Extract



*Skin protection for a flawless complexion*

#### Benefits on volunteers

- Improvement of skin texture: 37% of blackhead reduction in 28 days. From 7 days, pore refining perceived for up to 85% of volunteers
- Skin perfecter: spot reduction (-34%) at 28 days vs placebo

#### Mode of action

- 65% of protection against *C. acnes* secretome harmful effects
- Soothing effect: inhibition of bacteria lipase (-39%) & interleukines regulation (+157% of IL-10, -93% of IL-12)
- Antioxidant protective effect against lipid peroxidation (-79%)

#### Nature

Titrated extract of *Harungana madagascariensis* tree leaves

**Solubility:** water soluble  
**Form:** liquid  
**Use level:** 2%  
**Preservative free**

## Skin & Microbiota homeostasis



### EQUIBIOME™

Propylene Glycol - Aqua/Water -  
Arctium Lappa Root Extract



*Balance reactive skin for a perfect harmony*

#### Benefits on volunteers

- Relief for reactive skin
- Protective soothing properties: reduces skin redness (-60%) & limits stinging sensations (-20%) at D14 vs placebo
- Skin moisturizing activities: +58% skin water content at D7 vs placebo

#### Mode of action

- Skin-microbiota harmony promoter
- Improves keratinocyte-microbe tolerance
- Facilitates ecosystem biodiversity
- Reinforces barrier function

#### Nature

From sustainable Great Burdock roots

**Solubility:** water soluble  
**Form:** liquid  
**Use level:** 1%  
**Preservative free**

## Skin & Microbiota homeostasis

### SUBLIGANA™

Glycerin - Aqua/Water -  
*Harungana Madagascariensis* Extract



#### Skin protection for a flawless complexion

##### Benefits on volunteers

- Improvement of skin texture: blackhead reduction & pore refining perceived from 7 days, for up to 85% of volunteers
- Skin perfecter: spot reduction (-34%) at 28 days vs placebo

##### Mode of action

- 65% of protection against *C. Acnes* secretome harmful effects
- Soothing effect: inhibition of bacteria lipase (-39%) & interleukines regulation (IL-10: +157%, IL-12: -93%)

##### Nature

Titrated extract of *Harungana madagascariensis* tree leaves

**Solubility:** water soluble

**Form:** liquid

**Use level:** 2%

**Preservative free**



### TALADVANCE™

Glycerin - Aqua/Water -  
*Centella Asiatica* Leaf Extract



#### Skin balance & dermal boosting with *Talapetraka*

##### Benefits on volunteers

- Increases smoothness of the skin

##### Mode of action

- Dermal boosting & cellular viability: metabolism improvement (mTOR pathway: +147%) & cellular capacity maintenance (Survivin: +47%)
- Dermal protection (MMP-1: -54%)
- Anti-oxidant
- Epidermal balance: modulation of keratinocytes differentiation (IGFBP-3: x12)

##### Nature

The full essentials of *Centella*

**Solubility:** water soluble

**Form:** liquid

**Use level:** 2 to 5%

**Preservative free**

## Skin repair & integrity

## Skin relief

### TECA

Asiaticoside - Madecassic Acid - Asiatic Acid



#### Iconic repairing agent

##### Benefits on volunteers

- Quicker reparation of damaged skin vs placebo

##### Mode of action

- Anti-oxidant: -68%
- ECM protection (MMP-1 & 9 up to -63%)
- Dermis boosting (fibroblast migration: +61%;  $\alpha$ -Smooth Muscle Actin protein: +50%)

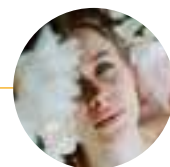
##### Nature

Titrated extract of *Centella asiatica* (TECA  $\geq$  95%)

**Form:** powder

**Use level:** 0.2%

**Preservative free**



## Soothing: Redness & Reactivity

### EMBELIA EXTRACT

Glycerin - Aqua/Water -  
*Embelia Concinna* Leaf Extract



#### Natural "Hug of the forest": the best relief for reactive & sensitive skin

##### Benefits on volunteers

- Immediate & long term relief (stinging test)

##### Mode of action

- Soothing by reducing PGE2, LTB4 & Histamine release
- Skin barrier function reinforcement (Involucrin: +46%; Loricrin: +131%)

##### Nature

Titrated extract of *Embelia* leaves

**Solubility:** water soluble

**Form:** liquid

**Use level:** 2%

**Preservative free**

### MADECASSOSIDE

Madecassoside



#### Powerful soothing dermo-cosmetic active for atopy-prone skin

##### Benefits on volunteers

- Efficacy on atopic dermatitis/psoriasis-prone skin from D14:
- Soothing effect (InflammAging™) / Itching reduction up to -65%
  - Anti-redness (erythema reduction up to -58.3%)
  - Moisturizing effect (desquamation reduction up to -50% & PASI score reduction -42.5%)
  - Smoothing effect (Roughness score reduction up to -50.1%)
  - Skin hydration increased by +113.6%

##### Nature

Highly pure madecassoside from *Centella* ( $\geq$  95%)

**Form:** powder

**Use level:** 0.2%

**Preservative free**

## Mood enhancer

### SEPIBLISS™ FEEL

Coriandrum Sativum (Coriander) Seed Oil



### Feeling & Looking good

#### Benefits on volunteers

- Powerful soothing effect
- Acupuncture-like well-being sensation
- Action on happiness molecules production

#### Mode of action

- Protection of neuronal extension, reduction of TRPA1 & NFκB activation
- Nitric oxide reduction similar to acupuncture effect
- Protection of oxytocine & β-endorphine production under stress conditions

#### Nature

Natural oil

**Solubility:** liposoluble

**Form:** liquid

**Use level:** 1%

**Preservative free**



### ROSABORA™

Tambourissa Trichophylla Leaf Extract



### A unique concentrate of polyphenols for anti-redness effect

#### Benefits on volunteers

- At 0.3%, -42% microcirculation at D28 on rosacea-prone skin
- Visible reduction of persistent redness from D28

#### Mode of action

- Modulation of "alert message transduction" (CAMP: -45%; KLK-7: -74%)
- Modulation of microcapillaries (THBS-1: +111%; HBD-2: -86%; VEGF: -71%)
- Soothing (PGE2: -26%; LTB4: -60%)
- Anti-free radicals effect after UVB-exposure: -12%

#### Nature

Highly pure polyphenols from Ambora (≥ 45%)

**Form:** powder

**Use level:** 0.3%

**Preservative free**

## Firming & Stretchmark control

## Body specifics

### TECA

Asiaticoside - Madecassic Acid - Asiatic Acid



### Iconic blend of actives for stretchmarks

#### Benefits on volunteers

- Quicker reparation of damaged skin vs placebo

#### Mode of action

- Anti-oxidant (free radicals: -68%)
- Soothing (AP-1: -51%; MMP-1 & MMP-9: -63%; TSP-1: +34%)
- Dermis boosting (lattices: +14%)
- Fibroblasts migration: +61%

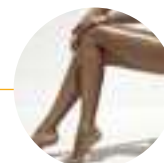
#### Nature

Titrated extract of Centella asiatica (TECA ≥ 95%)

**Form:** powder

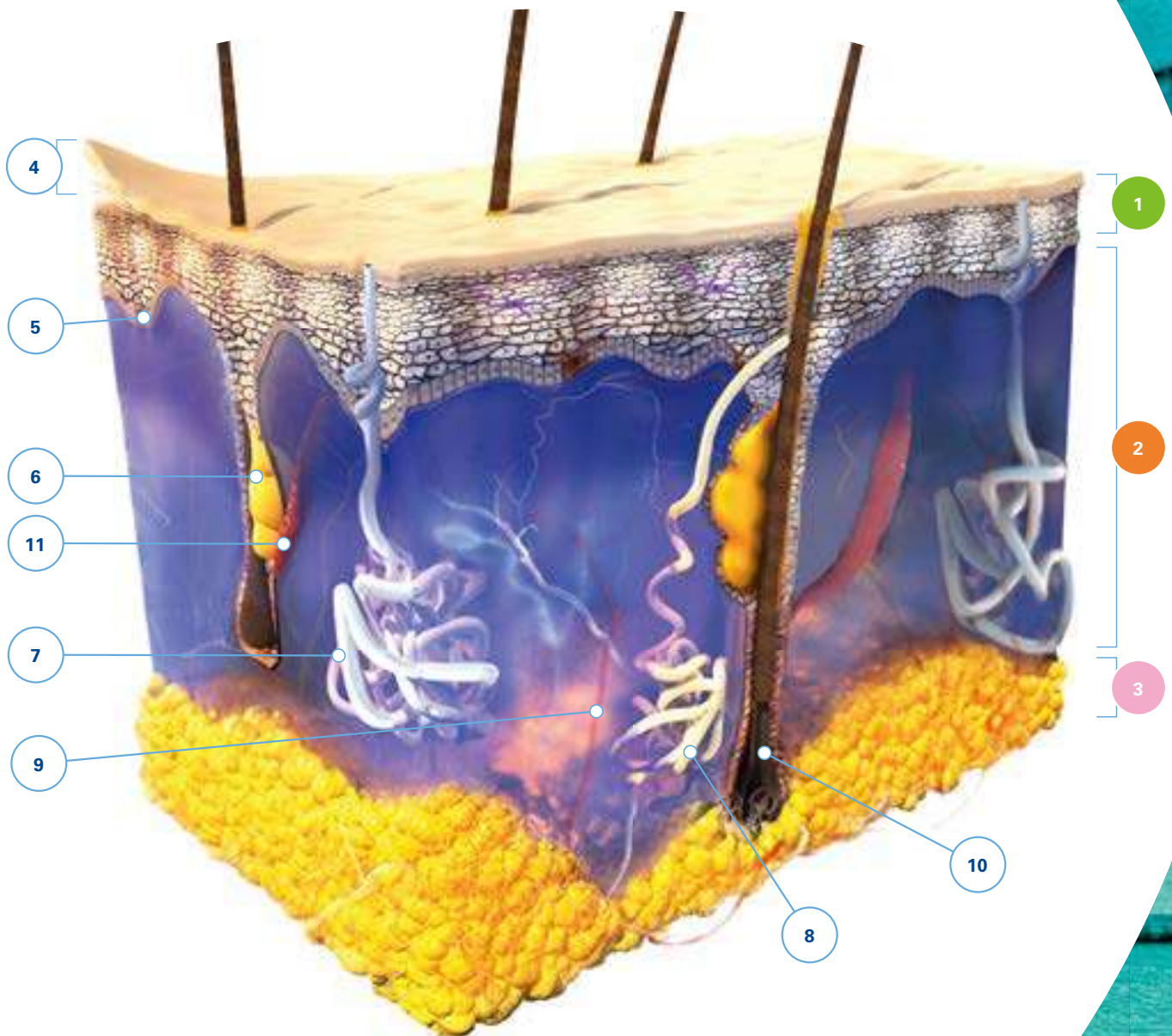
**Use level:** 0.2%

**Preservative free**





# Skin biology

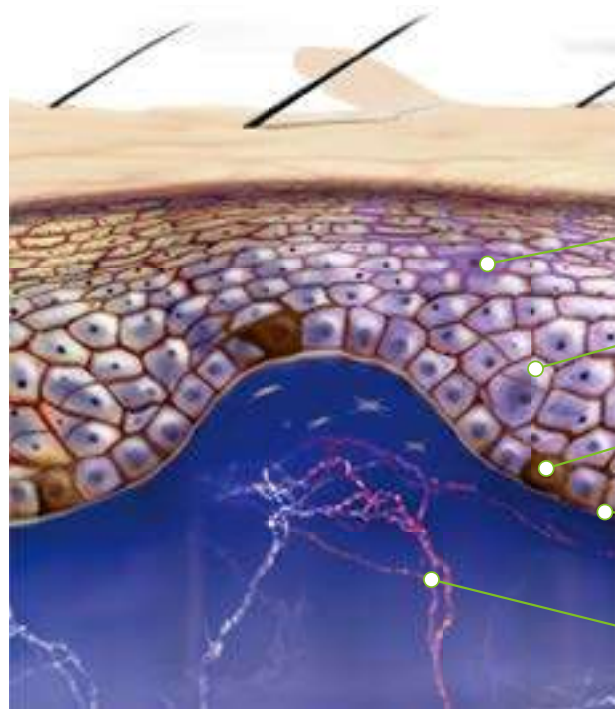


## SKIN

- |                            |                        |
|----------------------------|------------------------|
| 1 Epidermis                | 7 Eccrine sweat gland  |
| 2 Dermis                   | 8 Apocrine sweat gland |
| 3 Hypodermis               | 9 Vascular network     |
| 4 Stratum corneum          | 10 Hair follicle       |
| 5 Dermo-epidermal junction | 11 Erector muscle      |
| 6 Sebaceous gland          |                        |

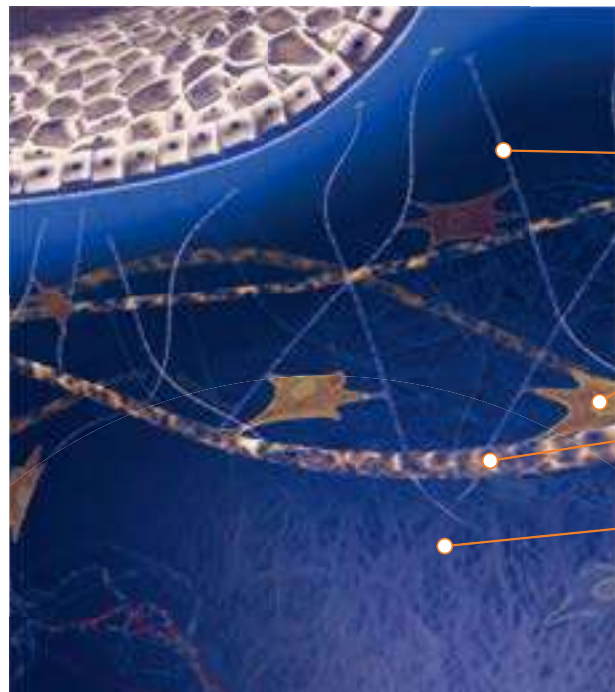
## ● EPIDERMIS

- 1 Stratum corneum
- 2 Stratum granulosum
- 3 Stratum spinosum
- 4 Basal layer
- 5 Dermo-epidermal junction
- 6 Vascular network
- 7 Keratinocyte
- 8 Melanocyte
- 9 Langerhans cell



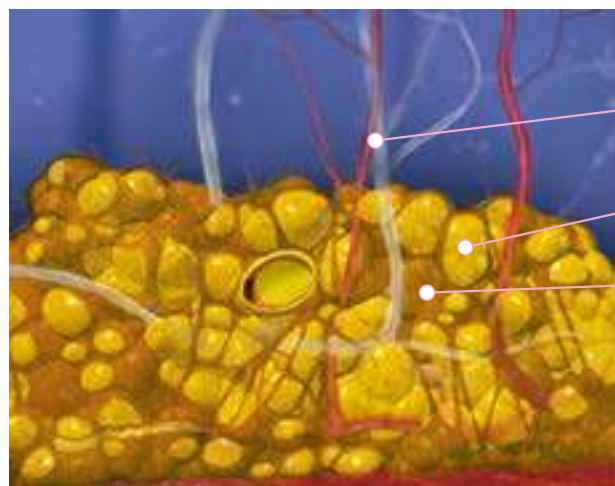
## ● DERMIS

- 1 Epidermis
- 2 Dermo-epidermal junction
- 3 Fibroblast
- 4 Collagen fiber
- 5 Elastin fiber
- 6 Ground substance
- 7 Papillar dermis
- 8 Reticular dermis



## ● HYPODERMIS

- 1 Adipocyte
- 2 Vascular network
- 3 Connective tissue



# Abbreviation list

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<b>AGE</b>	<i>advanced glycation end products</i>	<b>MMP</b>	<i>matrix metalloproteinase</i>
<b>AQP</b>	<i>aquaporin</i>	<b>mTOR</b>	<i>mechanistic target of rapamycin</i>
<b>CAMP</b>	<i>cyclic adenosine monophosphate</i>	<b>NFkB</b>	<i>nuclear factor kappa B</i>
<b>COL</b> or <b>COLL</b>	<i>collagen</i>	<b>PASI</b>	<i>psoriasis area severity index</i>
<b>DEJ</b>	<i>dermo-epidermal junction</i>	<b>PGE</b>	<i>prostaglandin E</i>
<b>ECM</b>	<i>extracellular matrix</i>	<b>ROS</b>	<i>reactive oxygen species</i>
<b>GAG</b>	<i>glycoaminoglycan</i>	<b>SKALP</b>	<i>skin derived antileukoprotease</i>
<b>HBD</b>	<i>human beta defensin</i>	<b>TEWL</b>	<i>trans-epidermal water loss</i>
<b>IL</b>	<i>interleukine</i>	<b>THBS</b>	<i>thrombospondin</i>
<b>KLK</b>	<i>kallikrein</i>	<b>TNF</b>	<i>tumor necrosis factor</i>
<b>LTB4</b>	<i>leukotriene B4</i>	<b>TSP1</b>	<i>thrombospondin 1</i>
<b>MDA</b>	<i>malondialdehyde</i>	<b>UVB</b>	<i>ultra-violet B</i>
		<b>VEGF</b>	<i>vascular endothelial growth factor</i>

## TRADEMARKS

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ROSABORA™, SUBLIGANA™, TALADVANCE™, TECA™ are filed or registred trademarks by Serdex.



# Legend

## FUNCTION

Actives

Functional Additives

## CERTIFICATIONS & APPROVALS



**CHINA Compliant:** all INCI names are listed on the 2021 IECIC list.



**QD Additive:** approved as QD additive in Japan.



**NATRUE Approved:** raw material approved according to NATRUE Standard.



**COSMOS Approved:** raw material verified by ECOCERT GREENLIFE, conform to the COSMOS Standard.

**MB**

**MASSBALANCE Certified:** supplied under MassBalance certification BVC-RSPO-1-1972708497. Contributes to the production of certified sustainable palm oil.



**VEGAN Suitability** assessed according to Seppic Vegan criteria:

- not manufactured using derived animal raw materials or processing aids,
- does not come into direct contact with material from animal origin at any stage of the manufacturing process,
- is not tested on animals in terms of regulation (EC) No.1223/2009 of the european parliament and of the council of 30 November 2009 on cosmetic products - Chapter V - Art.18.



**HALAL Certified:** raw material certified by HCS organism, officially recognized by the highest Halal authorities including MUI (Indonesia), JAKIM (Malaysia), MUIS (Singapore) and CICOT (Thailand).



**NATURALITY Profile:** naturality profile according to ISO 16128 norm, is available upon request (NOC: Natural Origin Content).



NOC  
≤50%














































NOC  
>50%



NOC  
>99%

# A-Z Index

<b>AMBIATY EXTRACT</b>	2	<i>Aqua/Water - Glycerin - Vernonia Appendiculata Leaf Extract</i>			 
<b>EMBELIA EXTRACT</b>	5	<i>Glycerin - Aqua/Water - Embelia Concinna Leaf Extract</i>			 
<b>EQUIBIOME™</b>	4	<i>Propylene Glycol - Aqua/Water - Arctium Lappa Root Extract</i>	 		 
<b>HETEROSIDES</b>	2	<i>Centella Asiatica Leaf Extract</i>	 		 
<b>MADECASSOSIDE</b>	5	<i>Madecassoside</i>			 
<b>ROSABORA™</b>	6	<i>Tambourissa Trichophylla Leaf Extract</i>			 
<b>SAKADIKIUM™</b>	3	<i>Glycerin - Aqua/Water - Hedychium Coronarium Root Extract</i>			 
<b>SUBLIGANA™</b>	4,5	<i>Glycerin - Aqua/Water - Harungana Madagascariensis Extract</i>			 
<b>SEPIBLISS™ FEEL</b>	6	<i>Coriandrum Sativum (Coriander) Seed Oil</i>	 	 	  
<b>TALADVANCE™</b>	3,4,5	<i>Glycerin - Aqua/Water - Centella Asiatica Leaf Extract</i>		 	 
<b>TECA™</b>	3,5	<i>Asiaticoside - Madecassic Acid - Asiatic Acid</i> <i>TECA: Titrated Extract of Centella Asiatica</i>	 		 

#### Nota:

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*Air Liquide Healthcare is a world leader in medical gases, home healthcare and healthcare specialty ingredients. Thanks to the 16,300 men and women from our Healthcare activities, we are an expert in chronic diseases following up 1,8 Million patients at home and in new places of care, and supplier of medical gases solutions and associated services for 15,000 hospitals and clinics. We are engaged alongside patients, healthcare professionals and hospitals to make the healthcare system efficient and virtuous for all, with one imperative: create value for the patient. Our claim 'Changing Care. With You' encapsulates this new perspective.*

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