Elage is a 100 % nature identical and nature-derived skin lightening agent.

Applications

Sun Care

Skin Care / Face Care

Make up / Concealers

Main Functions

- Lightening of the skin tone
- Balancing of the skin tone
- Reduction of hyperpigmented spots
- Reduction of red spots

Specifications and Characteristics

| INCI | Ellagic Acid |
|--------------------------|--|
| CAS REG. N° | 476-66-4 |
| APPEARANCE | Light beige or light yellow powder |
| PURITY | ≥ 99.0 % |
| RECOMMENDED PH OF USE | 3.0►5.5 |
| RECOMMENDED USE LEVEL | 0.1 • 1.0 % |
| REGULATORY STATUS | Globally approved |
| ORIGIN | derived-natural 100% renewable carbon |
| NATURALITY INDEX | 1 (ISO 16128-2) |
| CHEMICAL STUCTURE | но |

ADDITIONAL BY ECOCERT RAW HATERIAL COSMETICS

Visible spot reduction D0/D28



MINASOLVE® is an affiliate of MINAFIN® Group

Created in 2004, **The MINAFIN*** **Group**, specializes in fine chemistry for the life sciences and high tech industries. Activities include industrial subcontracting, development of chemical syntheses and industrial scale-up of custom-made processes as well as proprietary products with high added value for the pharmaceutical, cosmetics, agriculture and high-tech industries. Strong synergies exist between all business units: MINASOLVE, MINAKEM, MINAGRO, PENNAKEM, PRESSURE CHEMICALS, MINASCENT and EcoXtract.

Serving market leaders as well as emerging players

we support our customers' efforts to improve the quality of life in the global community by:

- Improving our chemistry and operational excellence today
- Creating and innovating for tomorrow
- Driving our enterprises together to go beyond expectations



Elage SAFE AND STABLE SKIN LIGHTENER







Skin radiance enhanced & spot removal





green solving attitude

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Self-assessment

after 28 days of application at 0.5% use-level



Application in cosmetic formulations

Elage is generally compatible with all common cosmetic ingredients. At pH > 6 it can lead to a yellow coloration, due to the formation of a coloured salt. Elage will not dissolve under neutral conditions, which has no negative impact on its activity. Like any common pigment, Elage is formulated in cosmetics under a dispersed state. The ingredient is preferably added to aqueous phases. Pre-mixing with wetting agents may help to ensure a uniform dispersion. High shear mixing is recommended.

The addition of **PEG-8 (4-6%)** helps to disperse Elage in water phase.

The addition of TiO₂ helps to get a white cream (4% recommended).

Since Elage is lowering the levels of protective melanin inside the skin, it is recommended to formulate it in combination with broad spectrum UV-filtering sunscreen.

Guidance formulation

Radiance Serum

| Phase | Raw Material | INCI name | % |
|-------|-------------------------------------|--|------|
| A | Emulgade 165 ⁽²⁾ | Glyceryl Stearate (and) PEG-100 Stearate | 3,00 |
| | Lanette O ⁽²⁾ | Cetearyl Alcohol | 1,50 |
| | Cetiol C5 (2) | Coco-Caprylate | 2,00 |
| | Myritol 318 ⁽²⁾ | Caprylic/Capric Triglycerides | 4,00 |
| | Massocare Sil DM 350 ⁽³⁾ | Dimethicone | 1,20 |
| | Bioxan SFT50 (3) | Helianthus Annuus Seed Oil (and) Tocopherol | 0,30 |
| В | Glycerin 99,5% (2) | Glycerin | 3,00 |
| | Xanthan Gum Mesh 80 ⁽³⁾ | Xanthan Gum | 0,20 |
| C | Eau déminéralisée | Aqua (Water) | Qsp |
| | Elage (1) | Ellagic Acid | 0,50 |
| | Polyglycol 400 ⁽³⁾ | PEG-8 | 4,00 |
| | Salicylic Acid | Salicylic Acid | 0,50 |
| D | Fresh'in Green+ (1) | Pentylene Glycol (and) Methyl Diisopropyl Propionamide | 0,30 |
| E | E-Leen Green B ⁽¹⁾ | Pentylene Glycol (and) Aqua (Water) (and) Sodium Benzoate (and) Benzoic Acid | 3,00 |

Manufacturing process

- 1. Mix all ingredients from Phase A and heat at 75°C.
- 2. Prepare Phase B and Phase C separately.
- 3. Mix Phase B and Phase C and Heat at 75°C.
- 4. Mix Phase B and Phase C at Rotor Stator for 2 minutes. then add Phase A.
- 5. Emulsify and decrease T°C under mixing.
- 6. Add Phase D then Phase E under mixing.

Properties, stability and microbiology

Meets Criteria A / ISO 11930

pH: 4.5 - 5.0

Raw materials suppliers

⁽¹⁾Minasolve Aspect: Off white fluid emulsion (2) BASE ⁽³⁾Quimica Masso Stable 4 weeks room T°C, 4°C, 45°C.

Guidance formulation Brightening Cream

| Phase | Raw Material | INCI name | % |
|-------|-------------------------------------|--|-------|
| | Emulgade 165 ⁽²⁾ | Glyceryl Stearate (and) PEG-100 Stearate | 6,00 |
| | Lanette O ⁽²⁾ | Cetearyl Alcohol | 3,00 |
| | Cetiol C5 ⁽²⁾ | Coco-Caprylate | 5,00 |
| | Myritol 318 ⁽²⁾ | Caprylic/Capric Triglycerides | 3,00 |
| Α | Massocare Sil DM 350 ⁽³⁾ | Dimethicone | 1,20 |
| | Uvinul A + B (2) | Ethylhexyl Methoxycinnamate (and) Diethylamino Hydroxybenzoyl Hexyl Benzoate | 10,00 |
| | Bioxan SFT50 (3) | Helianthus Annuus Seed Oil (and) Tocopherol | 0,30 |
| В | Glycerin 99,5% (2) | Glycerin | 2,00 |
| | Xanthan Gum Mesh 80 ⁽³⁾ | Xanthan Gum | 0,30 |
| | Eau déminéralisée | Aqua (Water) | Qsp |
| ~ | Elage (1) | Ellagic Acid | 0,50 |
| C | Polyglycol 400 ⁽³⁾ | PEG-8 | 4,00 |
| | Citric Acid | Citric Acid | 0,05 |
| D | E-Leen Green B (1) | Pentylene Glycol (and) Aqua (Water) (and) Sodium Benzoate (and) Benzoic Acid | 3,00 |

Manufacturing process

- 1. Mix all ingredients from Phase A and heat at 75°C.
- 2. Prepare Phase B and Phase C separately.
- 3. Mix Phase B and Phase C and Heat at 75°C.
- 4. Mix Phase B and Phase C at Rotor Stator for 2 minutes, then add Phase A.
- 5. Emulsify and decrease T°C under mixing.
- 6. Add Phase D under mixing.

| Properties, stability and | Raw materials suppliers |
|-------------------------------------|------------------------------|
| microbiology | ⁽¹⁾ Minasolve |
| Aspect: Off white viscous emulsion | ⁽²⁾ BASF |
| pH: 5.0 – 5.5 | ⁽³⁾ Quimica Masso |
| Stable 4 weeks room T°C, 4°C, 45°C. | |
| Meets Criteria A / ISO 11930 | |
| | |

The given information is accurate to the best of our knowledge. Customers are advised to perform their own studies on the usefulness of any ingredient for a particular application. Any recommended usage information is only provided as indication, and should not be considered as recommendation to violate of any laws, patents, or official regulations dealing with manufacture, composition, local procedures, product design, or end usage



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