Import and distribution for Serbia: Farmadria DOO
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TECHNICAL DATA SHEET

Product Name: Standardized Gotu Kola plant powder with 10% asiaticoside

INCI name: Centella Asiatica Extract

CAS: 84696-21-9

Botanical name: Centella asiatica (L.) Urban

Product quality: Standardization of the extract is the primary indicator of quality, as it ensures that the content of the main active substance does not depend on the natural variability of the plant but is determined precisely by analytical methods. This guarantees that each batch of the raw material maintains a stable level of biologically active molecules, which directly affects consistency in cosmetic formulations. In the case of Gotu Kola extract standardized to 10% asiaticoside, the declared concentration is confirmed through reliable measurements – typically using HPLC analysis – along with purity and stability control. Such regulation enables longer shelf life, better formulation compatibility and predictable efficacy, meaning every input of raw material provides the same level of activity. Therefore, standardized extracts represent higher quality compared to non-regulated botanical materials. Practically, 1 g of extract contains approximately 100 mg of asiaticoside, while the remainder consists of accompanying triterpenes and other natural components that support its action.

Description: The standardized Gotu Kola extract contains 10% asiaticoside. The extraction process is designed to isolate the most valuable fractions of triterpenoid saponins from the plant, with particular emphasis on asiaticoside as the key indicator of its pharmacological and cosmetic efficacy. Standardization ensures that every batch contains a uniform level of this active component, guaranteeing performance stability and repeatability in different formulations. The raw material features fine particle texture and a stable profile, performing well across a wide range of formulation systems, including aqueous gels, emulsions and cold-process formulations. Asiaticoside, as the leading triterpene compound, contributes to collagen synthesis and regenerative effects on the skin, while the remaining complex includes natural plant constituents such as madecassoside, asiatic acid and other triterpenes that support its biological activity. This combination provides synergistic action, especially in formulations intended for soothing, recovery and strengthening of the skin barrier.

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The extract is known for improving skin elasticity and tone while reducing visible irritation and redness, making it suitable for sensitive skin and for products targeting sensitive regions, such as the area around the eyes. Thanks to standardization, formulators can precisely control the active substance input and achieve consistent results, whether the extract is used in anti-aging serums, soothing creams, post-procedural products or formulations intended to support skin hydration and regeneration.

Bioactive compounds: The bioactive compounds of Gotu Kola include a wide spectrum of phytochemicals that together form the characteristic pharmacological profile of the plant. The composition is dominated by triterpenoid saponins, primarily asiaticoside, madecassoside, asiatic acid and madecassic acid; these are responsible for most of the regenerative, soothing and reparative effects. In addition to these key compounds, the extract contains several triterpenoid derivatives that support their activity and influence collagen synthesis and epidermal barrier restoration. The plant also contains flavonoids such as quercetin and kaempferol, including their glycosidic forms, which provide antioxidant protection and support microcirculation. Polyphenolic components, including phenolic acids such as chlorogenic and ferulic acid, offer additional protection from oxidative stress and contribute to extract stability. The plant also contains tannins, trace amounts of essential oils, phytosterols such as stigmasterol and beta-sitosterol, as well as polysaccharides, which contribute to the hydrating and soothing effect on the skin. This combination acts synergistically, resulting in reduced inflammation, stimulation of fibroblast activity, strengthened connective tissue and improved skin elasticity. It is precisely this complexity of triterpenes, flavonoids, sterols and polysaccharides that gives Gotu Kola its distinctive dermatological and cosmetic potential, particularly evident in formulations designed for skin repair, calming and structural support.

Benefits:

- Enhances collagen synthesis and strengthens connective tissue, improving skin firmness and elasticity.
- Accelerates skin regeneration and supports healing of irritations and damage.
- Reduces inflammation and redness due to anti-inflammatory components.
- Provides antioxidant protection and shields skin against oxidative stress and external factors.
- Improves microcirculation and nutrient supply to the skin.

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- Strengthens barrier function and decreases transepidermal water loss.
- Offers mild hydrating effect thanks to the presence of polysaccharides.
- Promotes a more even complexion and reduces the visibility of inflammation-related damage.

Usage: Standardized Gotu Kola extract with 10% asiaticoside is used as a water-soluble or dispersible active component in various cosmetic formulations, most commonly during the cold-process phase to preserve the stability of triterpenoid saponins. Formulators typically add it during the final phase of emulsification or directly into gel bases due to its good compatibility with humectants, mild emulsifiers and gelling polymers. In serum and gel formulations, it is used at 0.5–2%, providing a pronounced regenerative and soothing effect without irritation risk. In moisturising and anti-aging creams, it is applied at 1–3%, where, when combined with peptides, niacinamide or hyaluronic acid, it further enhances collagen synthesis and improves skin tone. In products for sensitive regions, such as the area around the eyes, it is used at 0.3–1%, ensuring a mild soothing effect without overburdening the formulation. In post-procedural products, tinted creams and after-sun formulations, it may be used up to 3%, supporting faster skin recovery and inflammation reduction, with stable performance and high tolerance.

Animal testing: In accordance with European Regulation (EC) No 1223/2009 on cosmetic products, the substance has not been tested on animals. The safety assessment is based on available toxicological data, scientific literature and validated alternative testing methods (in vitro and in silico). In silico refers to testing and assessment using computer models and simulations instead of in vivo laboratory testing on live organisms or in vitro testing on cell cultures. This note confirms compliance with the animal testing ban and is provided solely for informational purposes to support further use in cosmetic formulations.

GMO: Non-GMO

Vegan: Contains no ingredients of animal origin.