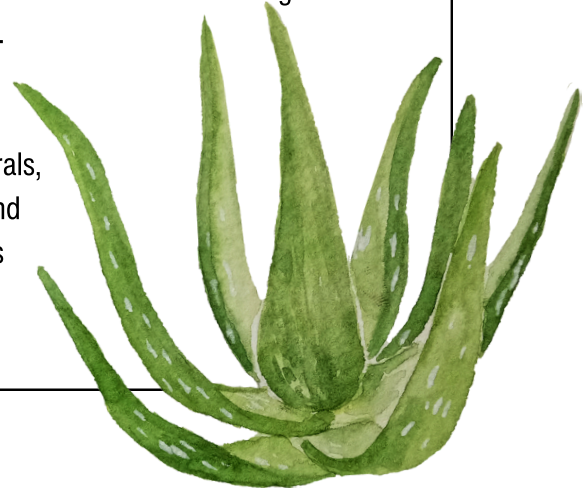


Aloe Vera

For centuries a key element in the herbal traditions of many cultures, Aloe vera (*Aloe barbadensis* Miller) is today one of the most studied and widely used natural ingredients in the cosmetic industry. As early as ancient Egypt, Aloe vera was considered the "plant of immortality" and was used in the beauty rituals of historical figures such as Cleopatra. Even today, its reputation endures thanks to its unique combination of natural origin, proven efficacy, and high tolerability, making it a versatile and valuable ingredient for the development of skincare products suitable even for sensitive skin.

The gel found within its thick, fleshy leaves is rich in bioactive compounds, including polysaccharides, vitamins, enzymes, and minerals, which contribute to its well-known moisturizing, soothing, healing, and anti-inflammatory properties. The topical effectiveness of Aloe vera is supported by numerous clinical studies, confirming its usefulness in treating irritations, redness, skin dryness, dermatitis, and psoriasis.



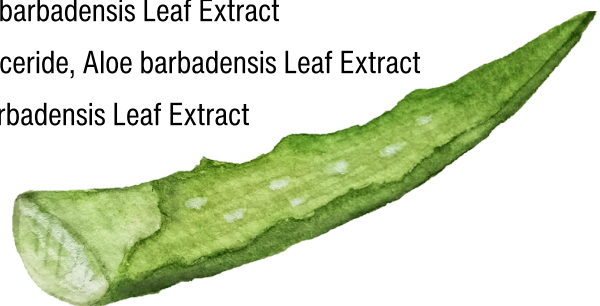
ARDA NATURA PROPOSAL

- 013194 E.GLICERICO ALOE BIO COSMOS S.C. - Glycerin, Aloe barbadensis Leaf Juice
- 011906 ARDALAT VEG ALOE - Aqua, Oryza sativa Starch, Glycerin, Methylpropanediol, Pentylene Glycol, Oryza sativa Bran Oil, Xanthan Gum, Caprylyl Glycol, Hydrolyzed Rice Protein, Aloe barbadensis Leaf Extract, Phenylpropanol
- 011341 E.GLICERICO ALOE U.C. PE - Glycerin, Aqua, Aloe barbadensis Leaf Extract
- 009867 E.GLICERICO ALOE BIO COSMOS - Glycerin, Aloe barbadensis Leaf Juice, Potassium Sorbate, Sodium Benzoate, Benzyl Alcohol
- 009098 E.IDROGLICERICO ALOE VERA - Aqua, Glycerin, Aloe barbadensis Leaf Extract
- 003031 E.G. ALOE 1:2 PE - Propylene Glycol, Aqua, Aloe barbadensis Leaf Extract
- 006408 E.L. ALOE TRIGLICERIDI - Caprylic/Capric Triglyceride, Aloe barbadensis Leaf Extract
- 005469 E.L. ALOE - Helianthus annuus Seed Oil, Aloe barbadensis Leaf Extract

COSMETIC EFFICACY*

- ☒ SOOTHING
- ☒ RESTORES SKIN BARRIER
- ☒ MAINTAINS SKIN HYDRATION
- ☒ PROTECTS SENSITIVE SKIN
- ☒ EMOLLIENT AND HYDRATING
- ☒ REFRESHES AND SOOTHES

*claim derived and synthesized, see bibliography



NUTRACEUTICAL EFFICACY

- ☒ SUPPORTS INTESTINAL REGULARITY
- ☒ PROMOTES DIGESTION
- ☒ EMOLLIENT AND SOOTHING
- ☒ INTESTINAL DETOX FUNCTION
- ☒ THROAT WELL-BEING

Aloe Vera

Introduction

Aloe vera (*Aloe barbadensis* Miller) has been used for centuries across various cultures for its therapeutic properties. It remains one of the most frequently used herbal remedies worldwide, particularly in dermatology and cosmetology. The gel extracted from its leaves is widely incorporated in skincare formulations for its reputed moisturizing, soothing, and healing effects. This review focuses on the topical use of Aloe vera, summarizing its botanical characteristics and evaluating its clinical effectiveness based on current literature.

Botany

Aloe vera is a succulent plant belonging to the Liliaceae family, with origins in North Africa but now cultivated globally in tropical and subtropical regions. The plant typically has thick, fleshy, lance-shaped leaves arranged in a rosette. Each leaf consists of three layers: an outer protective rind, a bitter yellow latex layer (aloe juice), and the inner gel-rich parenchyma. The gel, composed predominantly of water (99-99.5%), contains various biologically active compounds, including polysaccharides (notably acemannan), glycoproteins, vitamins, minerals, enzymes, amino acids, and phenolic compounds. The latex, which contains anthraquinones like barbaloin, is not used in cosmetics due to its irritant and laxative properties.

Activity and Clinical Evidence

The topical application of Aloe vera gel has been investigated for various skin conditions. Its efficacy has been attributed to anti-inflammatory, wound-healing, immunomodulatory, and moisturizing properties.

Wound Healing

Clinical studies have provided mixed but promising results on Aloe vera's wound healing potential. Fulton (1990) demonstrated that facial wounds treated with Aloe vera gel reepithelialized faster than those treated with a standard wound gel dressing, reducing healing time by approximately 72 hours. Another study by Syed et al. showed enhanced healing in patients with genital herpes using a 0.5% Aloe vera cream, with significantly higher cure rates and shorter healing durations compared to placebo.

Psoriasis and Radiation Dermatitis

Aloe vera has been evaluated for managing chronic plaque psoriasis. A randomized double-blind trial by Syed et al. (1996) found a significantly higher cure rate (83%) in the Aloe vera-treated group versus placebo (6.6%). Conversely, studies assessing Aloe vera for radiation-induced dermatitis (Williams et al., 1996) found no significant benefit over placebo, though some clinicians observed fewer than expected adverse skin effects.

Anti-Inflammatory and Moisturizing Effects

The anti-inflammatory effects of Aloe vera are linked to suppression of prostaglandin and bradykinin pathways and its antioxidant content. Its moisturizing effect is attributed to the high polysaccharide content, which enhances water retention in the stratum corneum. Acemannan, in particular, promotes fibroblast activity and collagen synthesis, contributing to skin repair.

Safety and Tolerability

Topical Aloe vera is generally well tolerated. Reported side effects include mild itching, burning, or contact dermatitis, which are typically transient. It is important to distinguish between Aloe vera gel (used in cosmetics) and the latex, which contains irritant compounds not suitable for topical use.

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