

TECHNICAL DATA SHEET

Calendula Butter

Product Name: Calendula Butter

INCI Name: Calendula Officinalis Oil, Palmitic/Stearic Triglyceride, Beeswax

CAS: 84776-23-8, 67701-30-8, 8012-89-3

Chemical Classification: Fats and oils

Functional Category: Skin conditioning agent, viscosity modifier, occlusive

Description: Calendula butter is a natural lipid raw material obtained by combining a macerate of marigold flowers (*Calendula officinalis*) in botanical oil with palmitic and stearic triglycerides and beeswax. This mixture creates a stable, creamy texture with a pleasant aroma and a golden-yellow hue, renowned for its soothing, regenerative, and protective properties. The composition of the butter provides exceptional biocompatibility with the skin. Botanical calendula oil brings valuable phytosterols, triterpene alcohols, flavonoids, carotenoids, and essential fatty acids, which work synergistically to exert anti-inflammatory and epithelializing effects. These components accelerate the renewal of damaged epithelium, reduce redness and irritation, and contribute to strengthening the hydrolipidic barrier. Palmitic and stearic triglycerides contribute to the stability and firmness of the butter, while beeswax forms a thin, natural film that protects the skin against environmental stressors without clogging pores. Thanks to its high content of flavonoids and carotenoids, calendula butter exhibits marked antioxidant properties. It neutralizes free radicals and prevents oxidative skin damage, thereby slowing the aging process. Upon contact with the skin, the butter melts, releasing botanical active compounds that alleviate inflammation, soften the superficial skin layer, and provide a long-lasting feel of elasticity and comfort. This raw material is especially recommended for the care of dry, sensitive, and irritated skin, as well as for formulations requiring regenerative and protective action. It is suitable for balms, body butters, creams, hand and foot care products, as well as products intended for delicate areas such as the eye contour or baby skin. Calendula butter joins the beneficial action of botanical extracts with the functionality of a stable lipid base, making it a unique ingredient that restores softness, resilience, and a healthy, even appearance to the skin. 100% natural product. Soft butter, odorless. Soluble in alcohol and oils, and insoluble in water.

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Bioactive Compounds: Calendula butter is rich in bioactive compounds derived from *Calendula officinalis* flowers. Its profile includes triterpene alcohols, phytosterols, flavonoids, carotenoids, saponins, phenolic acids, and traces of essential oils. Together, these substances exert regenerative, anti-inflammatory, and antioxidant actions. Triterpene alcohols, such as faradiol, arnidiol, and taraxasterol, possess potent anti-inflammatory effects. They accelerate skin recovery and soothe irritation. Their esters, faradiol myristate and faradiol laurate, further enhance epidermal regeneration. Phytosterols, dominated by β -sitosterol, stigmasterol, and campesterol, strengthen the lipid barrier and prevent moisture loss, thereby restoring elasticity and softness to the skin. Flavonoids, particularly quercetin, rutin, and isorhamnetin, act as antioxidants and calm redness and inflammation. Carotenoids, such as β -carotene, lutein, lycopene, and zeaxanthin, impart a warm golden color to the butter and protect the skin against UV-induced damage, helping to neutralize free radicals and preserve skin tone. Phenolic acids—ferulic, caffeic, and p-hydroxybenzoic acids—further reinforce antioxidant protection and accelerate tissue recovery. Saponins in calendula butter exert mild antiseptic and astringent effects, while essential oils containing α -cadinol, farnesol, and calendulin contribute to a purifying effect. This combination of ingredients creates a synergistic action that soothes, protects, and restores the skin. Thanks to its balanced phytochemical profile, calendula butter promotes regeneration, reduces inflammation, and guards the skin against oxidative stress. With regular use, the skin becomes soft, elastic, and visibly healthier.

Benefits:

- Acts as an excellent emollient, locking in moisture and preventing skin dehydration
- Contains anti-inflammatory compounds, such as flavonoids and beta-caryophyllene, which reduce inflammation and support skin healing
- Omega-6 fatty acid (linoleic acid) further aids in reducing inflammation and maintaining healthy skin
- Rich in antioxidants, including polyphenols and carotenoids, protecting the skin against free radical damage
- Antimicrobial and antifungal properties make it suitable for addressing minor skin infections

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- Mild and suitable for sensitive skin, showing good tolerance in sensitive skin formulations
- Helps improve the texture and spreadability of cosmetic products, making them smooth and creamy

Method of Use: In hydrating face and body creams and lotions, it is used at concentrations of 3% to 10% to provide optimal hydration, soothe irritated skin, and prevent moisture loss. In formulations for dry and sensitive skin, the concentration can be increased up to 20% to offer intensive care and protection. For lip balms and body butters, the concentration of calendula butter can reach up to 30%, as it acts in these products as a rich moisture source, protects against environmental stressors, and aids in regenerating damaged skin. In hand and foot care products, the butter is often used at higher concentrations, between 10% and 25%, delivering long-lasting protection and recovery for dry, chapped skin. When used in soaps, calendula butter contributes to moisturizing, with typical concentrations ranging from 5% to 15%. In hair conditioners and scalp treatments, the butter is incorporated at lower concentrations, between 2% and 5%, to soften and nourish the hair while soothing a sensitive scalp. Calendula butter blends easily with other botanical oils, waxes, and active ingredients, providing flexibility in creating diverse cosmetic formulations. Heat prior to use until melted, then add to the oil phase of formulations. Typical concentration for skin and lip care products ranges between 4% and 20%. For external use only.

Natural or Synthetic Ingredient: Calendula butter is a natural ingredient. It is obtained by combining a botanical macerate of marigold flowers (*Calendula officinalis*) in botanical oil with natural lipids—palmitic and stearic triglycerides—and beeswax. None of its components are of synthetic origin. The entire process involves physical blending and homogenization without chemical reactions or modifications, thereby preserving the natural bioactive compounds of the marigold flower. Consequently, calendula butter is classified as a natural cosmetic ingredient (natural origin) and fully complies with ECOCERT/COSMOS Natural certification standards.

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Animal Testing: In accordance with applicable European regulations (Regulation (EC) No 1223/2009 on cosmetic products), the substance has not been tested on animals. The safety assessment of the raw material 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 methods conducted using computer models and simulations rather than laboratory tests on living organisms (*in vivo*) or cell cultures (*in vitro*). This note confirms compliance with the animal testing ban and serves solely for informational purposes regarding further use of the raw material in cosmetic formulations.

GMO: Non-GMO

Vegan: Product is not vegan; contains beeswax