

TECHNICAL DATA SHEET

Product Name: VitaWhite Bearberry

INCI Name: Arbutin, Magnesium Ascorbyl Phosphate, Pentylene Glycol, Glycerin, Water, Sodium Benzoate, Potassium Sorbate

CAS: 497-76-7, 113170-55-1, 5343-92-0, 56-81-5, 7732-18-5, 532-32-1, 24634-61-5

Chemical Classification: Mixture

Functional Category: Skin whitening agent, Skin regeneration agent

Description: VitaWhite Bearberry is a skin-lightening agent derived from natural arbutin, extracted from bearberry leaves (*Arctostaphylos uva-ursi*), combined with a stabilized form of vitamin C, magnesium ascorbyl phosphate. It is intended to reduce dark spots such as age spots and hyperpigmentation by inhibiting melanin production, as confirmed by laboratory studies. This product enjoys great popularity in Asian countries, where it is valued for its effectiveness. VitaWhite Bearberry, due to the presence of natural hydroquinone, has a strong antioxidant effect, brightening the skin safely and effectively. It can be used in various cosmetic formulations such as lotions, creams, and serums, with recommended concentrations ranging from 4% to 8%. When combined with exfoliants, it is used in lower doses, up to 1%. It is water-soluble and stable at pH values between 4.0 and 7.0, which allows easy application in formulations. The product contains the preservatives sodium benzoate and potassium sorbate, ensuring its long-term stability.

Mechanism of Action: The synergistic effect of alpha arbutin and magnesium ascorbyl phosphate (the stabilized form of vitamin C) is based on their complementary mechanisms of action, which together more effectively reduce hyperpigmentation and brighten the skin. Alpha arbutin acts directly on tyrosinase, the enzyme crucial for melanin synthesis, by inhibiting its activity and preventing excessive melanin production. This results in the reduction of dark spots and even skin tone. Magnesium ascorbyl phosphate, as a derivative of vitamin C, acts as a powerful antioxidant that neutralizes free radicals in the skin, protecting it from oxidative stress caused by UV radiation and other factors that can increase melanin production. When these two ingredients are combined, a stronger skin-brightening effect is achieved. Magnesium ascorbyl phosphate not only reduces oxidative stress but also further inhibits melanin production by acting on the enzyme tyrosinase. Additionally, vitamin C enhances the stability and effective-

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ness of alpha arbutin, allowing it to more efficiently inhibit melanin synthesis. Together, these ingredients accelerate the process of reducing hyperpigmentation and contribute to an even, lighter skin tone. This synergistic effect makes the combination of alpha arbutin and magnesium ascorbyl phosphate highly suitable for skin-lightening treatments, as well as for the prevention of new pigmentations, providing dual protection and corrective action.

Benefits:

- **Reduction of hyperpigmentation:** Arbutin inhibits melanin production and brightens the skin.
- **Antioxidant protection:** Magnesium ascorbyl phosphate protects the skin from oxidative stress.
- **Even skin tone:** The combination of these two ingredients helps even out skin tone.
- **Reduction of dark spots:** Arbutin reduces dark spots and age spots.
- **Improved skin elasticity:** Magnesium ascorbyl phosphate promotes collagen synthesis.
- **Protection from UV damage:** The combination of these two ingredients reduces the harmful effects of UV radiation.

Usage: VitaWhite Bearberry is used in the production of various cosmetic products, such as creams, lotions, and serums, due to its properties that contribute to skin lightening. It is recommended in concentrations of 4% to 8% for creams and lotions, while for serums, it can be applied in lower concentrations of 1% to 2%, especially when combined with exfoliants or other active ingredients intended for deep skin regeneration. The product is water-soluble, allowing its wide application in various water-based cosmetic formulations. It is stable in products with pH values between 4.0 and 7.0, ensuring long-lasting effectiveness and safe use on the skin. The component is part of the aqueous phase (added at a temperature not exceeding 60°C/140°F) or at the end of the cosmetic product preparation process. For external use only.

Source of Raw Material: Bearberry leaves

Animal Testing: Not tested on animals

GMO: Not GMO

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