

TECHNICAL DATA SHEET

Product Name: Vitamin H (Biotin)

INCI Name: Biotin, Aqua, Propylene Glycol, Tetrasodium EDTA, Phenoxyethanol

CAS: 58-85-5; 7732-18-5; 57-55-6; 64-02-8; 122-99-6.

Chemical Classification: Mixture

Functional Category: Hair Conditioning Agent (conditioner), Skin Conditioning Agent; Skin Whitening Agent

IUPAC Name: 5-[(3aS,4S,6aR)-2-Oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl]pentanoic acid

Description: Biotin (vitamin B7) is part of the B vitamin complex. It is known for its effects on the health and beauty of skin, hair, and nails. It enhances blood circulation, has excellent transdermal permeability, and can promote the infiltration of other ingredients. When used with fruit acids, it has a good conditioning effect with other vitamins. The combination of biotin and sodium ascorbyl phosphate has shown significant synergy in reducing age spots and evening out skin tone. Studies have shown that it reduces wrinkles on aged skin by 37.6% when applied topically at concentrations of 0.25%. In individuals with thin and brittle hair, lotions containing 0.003% biotin strengthen the hair follicle and reduce hair brittleness. It also positively affects the appearance and health of nails. The solution is light yellowish in color with a characteristic odor. The pH of the solution at 25°C is between 5.5-7.5. Solution density: 1.010 - 1.070 g/ml. Refractive index: 1.400-1.460. The mixture is soluble in water, glycerin, ethanol, and practically insoluble in organic solvents. The biotin content is 5 mg/ml. During storage, cloudiness and precipitation may occur, but this does not affect the product quality. In such cases, shake the solution vigorously.

Benefits:

- Improves skin barrier function and contributes to increased tissue elasticity
- Acts as an "anti-age" substance
- Reduces age spots and evens out skin tone
- Strengthens hair follicles and reduces hair brittleness
- Strengthens nails

Disclaimer: The details provided here are specific to the identified material and may not remain accurate if that material is combined with other substances or used in different processes. The information presented is, to the best of the company's knowledge, considered precise and trustworthy as of the date mentioned. However, the company does not make any explicit or implied assurance, guarantee, or claim regarding the information's precision, trustworthiness, or comprehensiveness, and will not be held accountable for any losses, damages, or costs, whether direct or indirect, that arise from its use. Users are encouraged to independently verify the appropriateness and thoroughness of this information for their specific purposes.

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Application Method: Used in the production of skin and hair care products, such as day and night creams, anti-aging creams, shampoos, and conditioners. It is also used in nail polish production. Add to creams and lotions at a concentration of 1-5%. For shampoos and conditioners, recommended concentrations range between 1-6%, and for nail treatment, between 0.5-4%.

Animal Testing: The substance has not been tested on animals.

GMO: Non-GMO

Vegan: Does not contain animal-derived components.

Safety: According to the recommendations of the Cosmetic Ingredient Review (CIR) Expert Panel, it is considered a safe cosmetic substance.

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