

ALLANTOIN AND DERIVATIVES

Dermatological properties

Allantoin is a healing, moisturizing, soothing, anti-irritating, keratolytic and non-toxic agent useful in dermatological, cosmetic and veterinary preparations. Allantoin is a valuable cell-proliferating healing agent which stimulates healthy tissue formation. Allantoin has a pronounced keratolytic and skin softening action, acts as chemical debrider of necrotic and scaling tissue, cleansing up the areas where applied. Allantoin is effective at quite low concentrations, 0.1% up to 2%.

As natural component, Allantoin was found in fetal allantoic fluid, in wheat germ, rice polishings, comfrey roots, in dog urine and in the urine of pregnant women, in the earth-worm and as organic component of many soils.

Use of Allantoin

In treatment of skin ulcers, wounds, scalds, burns and sunburns, carbuncles, acne and skin eruptions, fissures and abrasions, impetigo, eczema, psoriasis.

Derivatives of Allantoin

The amphoteric characteristic of Allantoin permits combination with various chemical substances to form salts and complexes. In combination with various therapeutic substances Allantoin synergizes their activity reducing at same time their side-effects, sensitizing irritating or toxic properties. The complex and salts thus formed have been shown to possess useful dermatotherapeutic properties.

ALUMINUM SALTS

Combining astringency of aluminium and healing effect, minimizing irritations brought on by the aluminium salts. For deodorants and antiperspirants, shave products, skin-astringent lotions, antiacne, foot preparations and veterinary preparations.

Alcloxa (Aluminium chlorhydroxy allantoinate)

For deodorants and antiperspirants, shave products, skin-astringent lotions, antiacne.

Use level: 0.25% after-shave lotions, 1-2% antiacne, 0.25% antiperspirant-deodorant, 0.25% scalp preparations, 0.05-0.2% mouthwashes and toothpastes.

Aldioxa (Aluminium dihydroxy allantoinate)

Not soluble, amphoteric nature acting as antiacid and anti-ammonia to eliminate irritating effect, for dusting powder and creams, skin eruptions on children and infants.

Use level: 1-2% antiacne, 0.2-0.3% baby preparations, 0.1-2% mouthwashes and toothpastes.

Alcloxa Alcohol Soluble modified (Aluminium chlorhydroxy allantoinate propylene glycol)

Alcohol-soluble, for high alcohol antiperspirants and deodorants spray, pre- and after-shave preparations.

Use level: 6-10% in antiperspirants and deodorants, 12- 20% in lotions, creams and powder.

OTHER ALLANTOIN COMPOUNDS

Allantoin can be combined with other dermatological actives to give the following compounds.

Almeth (Allantoin N-acetyl-DL-methionine)

Anti-irritant, antidandruff, cleansing and healing scalp conditioners, imparts elasticity and softness to the hair and lustrous effect, useful in building up damaged protein molecules of the hair. For hair conditioners, sprays, hair dressing, shampoos and antidandruff, for nail strengtheners.

Use level: 0.2-0.5% scalp conditioners.

Alpantha (Allantoin DL-panthenol), [Allantoin Calcium Pantothenate](#)

For hair products, to stimulate epithelization, keratinization and healing of epidermal impaired functions, anti-irritant, hair grooming and lustre activity, adds high lights to the hairs.

Use level: 0.2-0.4% hair sprays.

Alglycera (Allantoin glycyrrhetic acid)

Anti-inflammatory agent with healing and keratolytic properties, for treatment of inflammatory, allergic pruritic dermatoses, epithelial stimulant, reduces irritation and sensitization of cosmetics such hair dyes bleaches, hair waving and hair sprays.

Alpolygal (Allantoin polygalacturonic acid)

Epithelial stimulant and detoxifying agent.

Use level: 0.1-0.2% moisturizing lotions, creams, body powders and emollient skin lotion foams.

[Allantoin Zinc Undecylenate](#)

For fungus infections and epidermophytosis.

[Allantoin Benzocaine](#) (Allantoin ethyl p-aminobenzoate)

Combines local anesthetic and antipruritic properties of benzocaine with healing effect of Allantoin.

Use level: 0.5-5% in cream or lotion formulations for treatment of sunburns, burns and similar dermatological disturbance.

Allantoin Silveracetate

Germicidal in 2nd and 3rd degree burns, not cause staining of tissue, useful in surgical glove powders. 1 ppm sufficient to kill *Pseudomonas aeruginosa*.

Use level: 0.5- 2% in creams and surgical glove powders.

Allantoin VC (Allantoin Ascorbate)

Hydroquinone stabilizer in skin bleaching preparations, antioxidant in hair dye preparations, nitrosamine inhibiting and inactivating, pain relieving in burns.

Use level: 0.4-0.5% in antiperspirant gels, creams and sprays; 0.3-0.5% as a hypo-allergenic deodorant.

PREPARATIONS INCLUDING ALLANTOIN AND ITS DERIVATIVES

- hand lotions and creams
- protective and night cream
- sun and after-sun products
- hair and scalp preparations, hair dressing, gels shampoos
- antiperspirants and deodorant
- foot preparations
- talcum powder
- lipsticks
- toothpastes and mouthwashes
- shave and after-shave products
- baby preparations
- eye preparations
- rectal preparations
- soaps and detergents