



# Allantoin

**INCI: Allantoin**

## **DESCRIPTION**

Allantoin is a free-flowing hygroscopic powder. It is widely used in cosmetic, dermatological and pharmaceutical formulations for its soothing and anti-irritation properties. Allantoin stimulates healthy, normal tissue formation even at low concentrations. Allantoin has been classified by the FDA as an Over-the-Counter (OTC) **Category I (safe and effective) active ingredient skin protectant**. It is FDA approved for this use at 0.5% to 2.0% in formulations. Allantoin is non-toxic, non-irritating, and non-allergenic. If you include it in your formulations and on your ingredient labels, but make no drug claims for it, it remains a cosmetic ingredient and need not be declared as an “active ingredient.”

## **BENEFITS**

- Temporary protection of minor cuts, scrapes, burns and sunburns
- Prevention and temporary protection of chafed, chapped, cracked or wind-burned skin and lips.
- Relief of dryness and softening of cold sores and fever blisters.
- Treatment and prevention of diaper rash and to help protect/seal out wetness.

## **APPLICATIONS**

Hand and body creams and lotions  
Lipstick and lip ointments  
Whipped butters  
Lotion bars  
Shaving products  
Sun and after-sun care products  
Face and baby wipes  
Baby and foot powders  
Acne products  
Anti-perspirants and deodorants  
Diaper rash creams

**RECOMMENDED USE LEVELS**      0.1% - 2.0%

## **FORMULATING WITH ALLANTOIN**

Allantoin is compatible with most ingredients used in personal care formulations. Water solubility at greater than 0.5% is an issue. Suspending Allantoin in a thick base is the best way to resolve this issue. When formulating, care should be taken to look for Allantoin recrystallization.

To incorporate 0.5% Allantoin, or more, into an emulsion product, the emulsion is made and Allantoin is added during the cooling process below 50°C (122°F). Good agitation is required to thoroughly disperse the Allantoin to achieve a suitable suspension. Addition of Allantoin at 0.5% or more or at temperatures above 50°C (122°F) in aqueous systems can cause solubilization and recrystallization upon cooling into larger particles which are perceptible during product use.

## **TYPICAL PROPERTIES**

CAS Number:	97-59-6
EINECS Number	202-592-8
Color	White Crystilline Powder
Odor	Odorless
Solubility in Water	0.5% max.
pH (0.5% water dispersion)	7.0
Melting point	228 to 238°C (with decomposition)
Molecular Weight	158.12

## **STORAGE**

Allantoin is a hygroscopic material (it will absorb water from the atmosphere). It should be stored in a tightly closed container in a cool, dry place.

## **LIMITATIONS**

This product is neither tested nor represented suitable for medical or pharmaceutical uses.

## **LIMITED WARRANTY – PLEASE READ CAREFULLY**

The information contained herein is offered in good faith based on Lotioncrafter's research and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information shall not be used in substitution for customers' tests to insure that Lotioncrafter's products are fully satisfactory for your specific applications. Our warranty is that the product will meet its current sales specifications. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

