

# Product Information Product Data Sheet

## **Allantoin**

## **Description**

Allantoin is a white to off-white, practically odourless crystalline powder.

### **Product identification**

**Product code: 50 0494 2** 

Chemical names: 5-ureido-hydantoine; 2,5-dioxo-4-imidazolidinyl urea

Synonyms: glyoxyldiureide

CAS No.: 97-59-6

EINECS No.: 202-592-8
INCI name: Allantoin

Empirical formula:  $C_4H_6N_4O_3$ Molecular mass: 158.12 g/mol

## **Specifications**

**Appearance:** white to off-white crystalline powder

**Identity:** corresponds

Appearance of solution: clear and colourless

pH (0.5% in water at 20°C): 4.0-6.0

Loss on drying: max. 0.1% w/w
Assay: 99.0-101.0% w/w

Sulphated ash: max. 0.1%
Optical rotation: -0.10° - 0.10°
Reducing substances: conforms
Acidity / Alkalinity: conforms

Related substances: conforms

Heavy metals:

Lead ≤ 5 ppm
 Cadmium ≤ 1 ppm
 Mercury ≤ 1 ppm
 Cobalt ≤ 1 ppm
 Chrome ≤ 1 ppm
 Nickel ≤ 1 ppm

© DSM Nutritional Products Ltd. 2015 PDS 50 0494 2 Version 07 Allantoin pds5004942\_07\_allantoin.docx

total (as lead)

2015-06-18 Replaces Version 06: 2012-11-29

≤ 10 ppm



# Product Information Product Data Sheet

## **Allantoin**

Arsenic ≤ 2 ppm

### Microbiological Purity:

•	Total aerobic plate count	≤ 100 CFU/g
•	Total yeast and moulds	≤ 100 CFU/g
•	Enterobacteria	< 10 CFU/g
•	Pseudomonas aeruginosa	negative in 1g
•	Staphylococcus aureus	negative in 1g
•	Escherichia coli	negative in 1g
•	Candida albicans	negative in 1g

## Solubility

Allantoin is readily soluble in warm water, and slightly soluble in water at 20 °C and in alcohol.

## Stability and storage

Allantoin may be stored for 96 months from the date of manufacture in the unopened original packaging and at a temperature below 25 °C. Exposure to direct sunlight should be avoided. The 'best use before' date is printed on the label.

#### Uses

As a cosmetic ingredient in Personal Care products and topical preparations.

## Safety

This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene.

For full safety information and necessary precautions, please refer to the respective DSM Material Safety Data Sheet.

## Legal notice

The information given in this publication is based on our current knowledge and experience, and may be used at your discretion and risk. It does not relieve you from carrying out your own precautions and tests. We do not assume any liability in connection with your product or its use. You must comply with all applicable laws and regulations, and observe all third party rights.



# Product Information Product Data Sheet

## **Allantoin**

## Additional information

To find out more about our ingredients, please contact your nearest DSM Nutritional Products office.

DSM Nutritional Products Ltd Product Management Building 241 PO Box 2676 CH-4002 Basel Switzerland	Tel.: +41 (0) 61 815 8899 Internet www.dsmnutritionalproducts.com
DSM Nutritional Products LLC 45 Waterview Boulevard Parsippany, NJ 07054-1298	Tel.: +1 (800) 526 0189 (Human Nutrition, Personal Care) Tel.: +1 (800) 451-8325 (Animal Nutrition) Internet <a href="https://www.unlimitednutrition-na.dsm.com">www.unlimitednutrition-na.dsm.com</a>
DSM Nutritional Products Europe Ltd. PO Box 2676 CH-4002 Basel Switzerland	Tel.: +41 (0) 61 815 7777 Internet www.unlimitednutrition-eu.dsm.com
DSM Singapore Industrial Pte Ltd. trading as DSM Nutritional Products Asia Pacific 30 Pasir Panjang Road #13-31 Mapletree Business City Singapore 117440	Tel.: + (65) 66326500 Internet www.dsmnutritionalproducts.com
DSM Nutritional Products China No. 476, Li Bing Road Zhangjiang High-Tech Park Pudong Area, Shanghai 201203 P.R. of China	Tel.: + 86 (0)21 6141 8188 Internet www.dsmnutritionalproducts.cn
DSM Produtos Nutricionais Brasil S.A. Avenida Engenheiro Billings, nº 1729 - Prédio 31 Sala A CEP:05321-010 São Paulo - SP Brasil	Tel.: + 55 (11) 3760-6300 Internet <u>www.dsmnutritionalproducts.com</u>



## **HYDROVANCE**

A moisturizing agent that provides non-tacky, nongreasy aesthetic in skin care products INCI name Hydroxyethyl Urea

## **Specifications**

Brookfield viscosity	< 200 cps
pH	6.0-8.5
Solid content	45.0-55.0 %

### Characteristics

Appearance	Clear, colorless to slightly yellow aqueous solution, free
	of particulates

#### Notes:

Typical Data are based on our own measurements or derived from the literature. They do not constitute part of the delivery specification.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

