

**Material safety data sheet**

According to EU Regulation 1907/2006 in the current version

**Allantoin****1. Identification of the substance/mixture and company**

---

Trade name: Allantoin  
I.N.C.I. Allantoin  
CAS No. : 97-59-6  
Ec Number 202-592-8  
Registration Number 01-2119953242-43-0004  
EINESCS No. : 0000  
REACH pre-registration No. : /  
Utilization: Raw material for cosmetic or professional use  
Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania  
Tel/Fax: +40259-436.755, [www.elemental.eu](http://www.elemental.eu)  
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de  
Sănătate Publică București.  
International emergency number: +49 180 2273-112

**2. Hazards Identification**

---

**2.1 Classification of the substance or mixture**

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication:

**2.2 Label elements**

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements: --

This product is not subject to hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%

**3. Declaration of ingredients**

---

**3.1. Substances**

The product does not contain substances classified as being hazardous to human health or the environment pursuant to the provisions Regulation (EU) 1272/2008 (CLP) (and subsequent amendments and supplements) in such quantities as to require the statement.

**4. First aid measures**

---

**4.1 Description of first aid measures**

Not specifically necessary. Observance of good industrial hygiene is recommended.

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### Allantoin

#### 4.2 Main symptoms and effects, both acute and delayed

No episodes of damage to health ascribable to the product have been reported.

#### 4.3 Indication to consult a physician immediately or any special treatments

No data available

### 5. Fire fighting measures

---

#### 5.1 Means of extinction

Suitable extinguishing equipment

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

Unsuitable extinguishing equipment

None in particular.

#### 5.2 Special hazards arising from the substance or mixture

Hazards caused by exposure in the event of fire

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

#### 5.3 Recommendations for fire-fighters

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137)

### 6. Accidental release measures

---

#### 6.1 Personal precautions, protective devices and emergency procedures

Use breathing equipment if fumes or powders are released into the air. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2 Environmental precautions

Use breathing equipment if fumes or powders are released into the air. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.3 Methods and materials for containment and remediation

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### Allantoin

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

### 7. Handling and storage

---

#### 7.1 Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

#### 7.3 Specific end uses

No data available

### 8. Exposure controls / personal protection

---

#### 8.1 Control parameters

No data available

#### 8.2 Exposure controls

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate not otherwise classified (PNOC respirable fraction: 3 mg/m<sup>3</sup>; PNOC inhalable fraction: 10 mg/m<sup>3</sup>). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment.

Comply with the safety measures usually applied when handling chemical substances.

#### HAND PROTECTION

None required.

#### SKIN PROTECTION

None required.

#### EYE PROTECTION

None required.

#### RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

#### ENVIRONMENTAL EXPOSURE CONTROLS

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### Allantoin

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## 9. Physical and chemical properties

---

### 9.1 Information on physical and chemical properties

Appearance: powder  
Colour: white  
Odour: odourless  
Odour threshold: Not available  
pH: 4  
Melting point / freezing point: 229 °C  
Initial boiling point: Not available  
Boiling range: Not available  
Flash point: 420 °C  
Evaporation rate: Not available  
Flammability (solid, gas): Not available  
Lower inflammability limit: Not available  
Upper inflammability limit: Not available  
Lower explosive limit: Not available  
Upper explosive limit: Not available  
Vapour pressure < 0.001 Pa  
Vapour density: Not available  
Relative density: 1,71 g/cm<sup>3</sup>  
Solubility: Slightly soluble in water.  
Partition coefficient: n-octanol/water -3,14  
Auto-ignition temperature: Not available  
Decomposition temperature: 229°C  
Viscosity: Not available  
Explosive properties: not applicable  
Oxidising properties: not applicable

### 9.2 Other information

Molecular weight 158,12

## 10. Stability and reactivity

---

### 10.1 Responsiveness

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.2 Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3 Possibility of dangerous reactions

The powders are potentially explosive when mixed with air.

### 10.4 Conditions to avoid

Avoid environmental dust build-up.

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### Allantoin

#### 10.5 Incompatible materials

Information not available

#### 10.6 Hazardous decomposition products

In decomposition develops: carbon oxides.

### 11. Toxicological information

---

#### 11.1 Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

#### ACUTE TOXICITY

##### ALLANTOIN

LD50 (Oral) > 5000 mg/kg rat

LD50 (Dermal) > 5000 mg/kg rabbit

#### SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

#### SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

#### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

#### STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### 12. Ecological information

---

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### Allantoin

#### 12.1 Toxicity

ALLANTOIN

LC50 - for Fish > 5000 mg/kg Brachydanio rerio

EC50 - for Crustacea > 100 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants > 100 mg/l/72h Desmodesmus subspicatus

#### 12.2 Persistence and degradability

ALLANTOIN

Rapidly degradable

#### 12.3 Bioaccumulation potential

ALLANTOIN

Partition coefficient: n-octanol/water 3,14

#### 12.4 Ground mobility

No data available

#### 12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

#### 12.6 Other adverse effects

No data available

### 13. Disposal considerations

---

#### 13.1 Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Solid residues may be suitable for disposal in an authorised landfill site.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### 14. Transport information

---

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

#### 14.1 UN number

Not applicable

#### 14.2 UN shipping name

Not applicable

#### 14.3 Class of danger for transport

Not applicable

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### Allantoin

#### 14.4 Packing group

Not applicable

#### 14.5 Environmental hazards

Not applicable

#### 14.6 Special precautions for users

Not applicable

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Information not relevant

### 15. Regulatory information

---

#### 15.1 Regulations and legislation on health, safety and environment specific to the substance or mixture

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006  
None

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

#### 15.2 Chemical safety assessment.

Has not been performed / is not yet available a chemical safety assessment for the substance.

### 16. Additional information

---

#### 16.1 Abbreviations:

ADR: European Agreement concerning the carriage of Dangerous goods by Road

CAS NUMBER: Chemical Abstract Service Number

CE50: Effective concentration (required to induce a 50% effect)

CE NUMBER: Identifier in ESIS (European archive of existing substances)

CLP: EC Regulation 1272/2008

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### Allantoin

DNEL: Derived No Effect Level

EmS: Emergency Schedule

GHS: Globally Harmonized System of classification and labeling of chemicals

IATA DGR: International Air Transport Association Dangerous Goods Regulation

IC50: Immobilization Concentration 50%

IMDG: International Maritime Code for dangerous goods

IMO: International Maritime Organization

INDEX NUMBER: Identifier in Annex VI of CLP

LC50: Lethal Concentration 50%

LD50: Lethal dose 50%

OEL: Occupational Exposure Level

PBT: Persistent bioaccumulative and toxic as REACH Regulation

PEC: Predicted environmental Concentration

PEL: Predicted exposure level

PNEC: Predicted no effect concentration

REACH: EC Regulation 1907/2006

RID: Regulation concerning the international transport of dangerous goods by train

TLV: Threshold Limit Value

TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.

TWA STEL: Short-term exposure limit

TWA: Time-weighted average exposure limit

VOC: Volatile organic Compounds

vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation

WGK: Water hazard classes (German).

#### Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.