



SAFETY DATA SHEET

Allantoin

Version 2.0

Revision Date 01/12/2015

Print Date 08/07/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Allantoin
Substance name : allantoin
CAS-No. : 97-59-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Ingredient for personal care products

1.3 Details of the supplier of the safety data sheet

Company : Chemistry Connection
253 Sturgis Rd
Conway, AR 72034
(501) 470-9689

1.4 Emergency telephone number

Emergency # 1-800-424-9300 (24 HR CHEMTREC)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	crystalline, powder
Colour	white, off-white
Odour	odourless

GHS Classification

Combustible dust :

GHS Label element

Signal word : Warning

Hazard statements : May form combustible dust concentrations in air

Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No specific symptoms known.

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Additional hazards and advice

Risk of dust explosion.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Urea, (2,5-dioxo-4-imidazolidinyl)

Brief description of the product : Active ingredient

Molecular formula : C4-H6-N4-O3

Hazardous components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : No specific symptoms known.

Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Flammable properties

Flash point : Not applicable

Fire fighting

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Suitable extinguishing media : Water
Foam

Further information : Consider dust explosion hazard.

Protective equipment and precautions for firefighters

Specific hazards during fire-fighting : None known.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Avoid dust formation.

Environmental precautions : Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up : Sweep up and shovel.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8.

Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.
Take precautionary measures against static discharges.

Conditions for safe storage : Keep away from direct sunlight.
Keep container tightly closed and dry.

Materials to avoid : No special restrictions on storage with other products.

Storage temperature : < 77 °F (< 25 °C)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
In case of high dust concentration use a dust mask applicable to local conditions.

Hand protection : Glove material: for example nitrile rubber

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Eye protection : Safety glasses
Skin and body protection : Lightweight protective clothing
Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : crystalline, powder
Colour : white - off-white
Odour : odourless
Odour Threshold : No information available.
pH : 4.0 - 6.0 (5 g/l, 20 °C)
Melting point/range : 225 - 236 °C
Boiling point/boiling range : not determined
Flash point : Not applicable
Flammability (solid, gas) : May form combustible dust concentrations in air
Vapour pressure : < 0.001 hPa (at 25 °C; calculated (citation from literature))
Relative vapour density : Not applicable
Density : ca. 1.7 g/cm³ (at 20 °C)
Water solubility : 5.7 g/l (25 °C)
40 g/l (75 °C)
Solubility in other solvents : Ethanol: 2 g/l
Diethylether: insoluble
Partition coefficient: n-octanol/water : log Pow -3.14 (calculated (citation from literature))
Auto-ignition temperature : No data available
Thermal decomposition : Decomposes on heating.
Potential for exothermic hazard
Explosive properties : Not explosive
Oxidizing properties : No data available

9.2 Other information

Combustibility index for deposited dust : 2 (23 °C)
: 2 (100 °C)
Dust explosion class : St(H)1 (Product sample, Median value of the tested sample 0.040 mm, Loss on drying 0.2 %; The value was determined in the modified Hartmann tube.)
Minimum ignition energy : > 1,000 mJ (Product sample, Median value of the tested sample 0.040 mm, Loss on drying 0.2 %, EN 13821)
The Minimum ignition energy (MIE) of a dust/air mix depends

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on the particle size the water content and the temperature of the dust. The finer and the dryer the dust the lower the MIE.

: General remark: The indicated dust explosion characteristics are only valid for this product and are sensitive to the sample's parameters.



Powder volume resistivity : ca. 8E+08 Ohmm (Product sample, Median value of the tested sample 0.040 mm, Loss on drying 0.2 %)

Minimum ignition temperature of a dust/air mix : 570 °C (Median value of the tested sample 0.040 mm) determined in the BAM oven

Molecular weight : 158.12 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Dust may form explosive mixture in air.

Conditions to avoid : Heat.

Incompatible materials : Strong acids and strong bases
Strong oxidizing agents

Hazardous decomposition products : No decomposition if used as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
(Directive 67/548/EEC, Annex V, B.1.)

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Skin irritation : No skin irritation (Rabbit, OECD Test Guideline 404)

Eye irritation : No eye irritation (Rabbit, OECD Test Guideline 405)
: Dust contact with the eyes can lead to mechanical irritation.

Sensitisation : Did not cause sensitization. (Mouse, Local Lymph Node Assay (LLNA), OECD Test Guideline 429)

Carcinogenicity : (Rat , Oral)
No indication for carcinogenicity known.

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- Genotoxicity in vitro : not mutagenic (Ames test, OECD Test Guideline 471)
- Reproductive toxicity : No indication for adverse effects on fertility known.
- STOT - single exposure (A-acute exposure) : The substance or mixture is not classified as specific target organ toxicant, single exposure.
- STOT - repeated exposure : This information is not available.
- Aspiration toxicity : No aspiration toxicity classification

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

- Toxicity to fish : Danio rerio (zebra fish)
LC50 > 5,000 mg/l
(nominal concentration)
(OECD Test Guideline 203)
- Toxicity to daphnia and other aquatic invertebrates : Daphnia magna (Water flea)
EC50 (48 h) > 100 mg/l
(nominal concentration)
(OECD Test Guideline 202)
: NOEC (48 h) >= 100 mg/l
(nominal concentration)
- Toxicity to bacteria : activated sludge
NOEC (3 h) 1,000 mg/l
(OECD Test Guideline 209)

Persistence and degradability

- Biodegradability : Readily biodegradable.
ca. 72 % (28 d)
(OECD Test Guideline 301B)

Bioaccumulative potential

- Partition coefficient: n-octanol/water : log Pow -3.14 (calculated (citation from literature))

Mobility in soil

- Distribution among environmental compartments : No data available

Results of PBT and vPvB assessment

- Assessment : The substance does not fulfill the PBT criteria.
: The substance does not fulfill the vPvB criteria.

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Other adverse effects

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : User must determine if any wastes generated exhibit hazardous characteristics as per 40 CFR Part 261 or other national / local legislation.

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

TSCA list : Not relevant

Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

allantoin	97-59-6	90 - 100 %
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New Jersey Right To Know

allantoin	97-59-6	90 - 100 %
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The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

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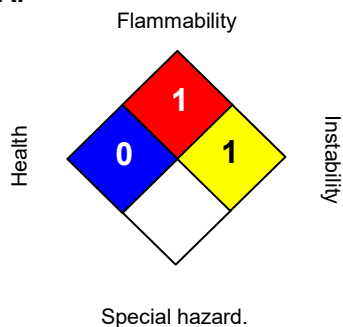
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SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	1

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Abbreviations: ACGIH = American Conference of Governmental Industrial Hygienists. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. CFR = Code of Federal Regulations. CPR = Controlled Products Regulations. DSL = Canadian Domestic Substance List. DOT = Department of Transportation. EINECS = European Inventory of New and Existing Chemical Substances. EPA = Environmental Protection Agency. HCS = Hazardous Communication Standard. HEPA = High Efficiency Particulate Air. HMIS = Hazardous Material Identification System. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IMDG = International Maritime Dangerous Good. NFPA = National Fire Protection Association. NIOSH = National Institute of Occupational Safety and Health. NJTSR = New Jersey Trade Secret Registry. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. SARA = Superfund Amendments and Reauthorization Act. TDG = Transportation of Dangerous Goods. TLV = Threshold Limit Value. TSCA = Toxic Substance Control Act. WHMIS = Workplace Hazardous Materials Information System.