

Substance key: SXR076295

Revision Date: 20.01.2014

Version : 9 - 1 / EU

Date of printing : 15.10.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

ALLANTOIN

Material number: 105266

REACH - Registration number 01-2119953242-43-0000, 01-2119953242-43-0002
according to article 20(3):

CAS number : 97-59-6

EC number : 202-592-8

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

Relevant identified uses of the substance or mixture

Industry sector : Personal Care

Type of use : Raw material for cosmetics

Pharmaceuticals

1.3. Details of the supplier of the safety data sheet

Identification of the company

Clariant Produkte (Deutschland) GmbH

65926 Frankfurt am Main

Telephone no. : +49 69 305 18000

Information about the substance/mixture

Corp Product Stewardship

e-mail: MSDS.CorpPS_BU_ICS@clariant.com

1.4. Emergency telephone number

00800-5121 5121 (24 h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according CLP regulation (Regulation (EC) No. 1272/2008, as amended)

The product does not require classification and labelling as hazardous according to CLP/GHS.

Classification according EC Directive (67/548/EEC or 1999/45/EC, as amended)

The product is not classified as dangerous according to EC directives/the relevant national laws.

2.2. Label elements

Labelling according CLP regulation (Regulation (EC) No. 1272/2008, as amended)

The product does not require classification and labelling as hazardous according to

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CLP/GHS.

2.3. Other hazards

No additional hazards are known except those derived from the labelling.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

5-Ureido-Hydantoin

INCI name

Allantoin

CAS number :

97-59-6

EC number:

202-592-8

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing and shoes.

Ensure that the First Aid Personnel are aware of the product involved, and take precautions to protect themselves (e.g. wear personal protection equipment).

After inhalation

When inhaled remove to fresh air and seek medical aid.

After contact with skin

If on skin, rinse well with water.

After contact with eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.

After ingestion

No special measures necessary.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms

No symptoms known currently.

Hazards

No hazards known at this time.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam
Water mist

5.2. Special hazards arising from the substance or mixture

In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Carbon dioxide (CO₂)
nitrogen oxides (NO_x)

5.3. Advice for firefighters

Special protective equipment for firefighting

Self-contained breathing apparatus
Full protective suit

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Wear suitable protective equipment.

6.2. Environmental precautions

Do not allow to enter drains or waterways

6.3. Methods and material for containment and cleaning up

Take up mechanically
Can be landfilled or incinerated, when in compliance with local regulations.

6.4. Reference to other sections

Additional information

Information regarding Safe handling, see chapter 7.
For personal protection see section 8.
Information regarding Waste Disposal, see chapter 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures

Wash hands before breaks and at the end of workday.
Use protective skin cream before handling the product.
Take off immediately all contaminated clothing and wash it before reuse.
Do not eat, drink or smoke when using this product.

Advice on protection against fire and explosion

Observe the general rules of industrial fire protection

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Dust explosion class : not capable of dust explosion

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Keep only in the original container.

Advice on storage compatibility

Avoid storage near incompatible agents (see section 10).

Do not store or transport together with foodstuffs

7.3. Specific end use(s)

No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Exposure limit values are not available.

DNEL/DMEL values

Allantoin

EC number: 202-592-8

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Route of exposure	Personnel	Exposure time/Effect	Value	Remarks
Dermal	Workers	Long-term systemic effects	284 mg/kg bw/day	DNEL
Dermal	General population	Long-term systemic effects	284 mg/kg bw/day	DNEL
Oral	General population	Long-term systemic effects	56,8 mg/kg bw/day	DNEL

PNEC values

Allantoin

EC number: 202-592-8

CAS number : 97-59-6

Environmental compartment	Personnel/Exposure time/Effect	Value
Fresh water		1 mg/l
salt water		0,1 mg/l
Water (intermittent release)		10 mg/l
Fresh water sediment		0,85 mg/kg sediment dw
Marine sediment		0,085 mg/kg sediment dw
Sewage treatment plant		10000 mg/l
Soil		0,256 mg/kg soil dw

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

General protective measures

Observe the usual precautions for handling chemicals.

Ensure that eyewash stations and safety showers are close to the workstation location.

Avoid contact with skin and eyes.

Do not breathe dust.

Respiratory protection :

Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure
P2 filter

Hand protection :

Long-term exposure
Impervious butyl rubber gloves
Minimum breakthrough time / gloves : 480 min
Minimum thickness / gloves 0,7 mm
For short-term exposure (splash protection):
Nitrile rubber gloves.
Minimum breakthrough time / gloves : 30 min
Minimum thickness / gloves 0,4 mm
These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used. With solid dry substances permeation is not to be expected, therefore the breakthrough-time for this protective glove has not been measured.

Eye protection :

Safety glasses

Body protection :

working clothes

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : solid (20 °C ; 101,3 kPa)

Form : powder

Particle size : 25,2 - 28,2 µm 90 %
Method : ISO 13320-1

Particle size : 8 - 9,6 µm 50 %
Method : ISO 13320-1

Particle size : 1,4 - 1,6 µm 10 %
Method : ISO 13320-1

Colour : white

Odour : odourless

Odour threshold : not available

pH value : 4, - 6 (5 g/l)

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Melting point :	226 - 232 °C Method : OECD Test Guideline 102 Decomposition
Boiling point :	Decomposes below the boiling point.
Flash point :	not applicable
Evaporation rate :	not applicable
Flammability :	The product is not flammable.
Lower explosion limit :	not applicable
Upper explosive limit :	not applicable
Combustion number :	BZ2 Short flaring up without spreading
Minimum ignition energy :	not available
Vapour pressure :	< 0,000010 hPa (20 °C) Method : other (calculated)
Vapour density relative to air :	not applicable
Relative Density:	1,70 - 1,72 (22 °C) Method : OECD Test Guideline 109
Solubility in water :	4,9 g/l (20 °C) Method : OECD Test Guideline 105
Miscibility with water :	not tested.
Soluble in ... :	not available
Solubility/qualitative :	not tested.
Octanol/water partition coefficient (log Pow) :	-2,26 (20 °C) Method : OECD Test Guideline 107
Ignition temperature :	not applicable
Self-ignition temperature :	No self-ignition below the decomposition temperature.
Thermal decomposition :	227 °C Method : DSC
Viscosity (dynamic) :	not applicable
Viscosity (kinematic) :	not applicable
Viscosity (Efflux time) :	not applicable
Explosive properties :	Explosive according to EU supply regulations : Not explosive Method : Expert judgement
Oxidizing properties :	Type of oxidizing effect : not oxidizing Method : Expert judgement

9.2. Other information

Density :	1,71 g/cm ³ (22 °C) Method : OECD Test Guideline 109
Bulk density :	approx. 600 kg/m ³

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Surface tension :

Based on chemical structure, no surface activity is expected or can be predicted.

SECTION 10: Stability and reactivity

10.1. Reactivity

See section 10.3. "Possibility of hazardous reactions"

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.
Stable

10.4. Conditions to avoid

not known

10.5. Incompatible materials

not known

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide
nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information related to the product itself:

Acute oral toxicity :

LD50 > 5.000 mg/kg (rat)
Method : OECD Test Guideline 401
Source : CIT

Acute dermal toxicity :

LD50 > 5.000 mg/kg (rat)

Acute inhalation toxicity :

It was demonstrated that during intended and foreseen applications, no respirable aerosol is formed.

Irritant effect on skin :

non-irritant (rabbit)
Method : OECD Test Guideline 404

Irritant effect on eyes :

non-irritant (rabbit eye)
Method : OECD Test Guideline 405
Source : CIT

Sensitization :

non-sensitizing
Method : OECD Test Guideline 429

Repeated dose toxicity:

not available

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Assessment of mutagenicity :	Not mutagenic in Ames Test. Source : literature	
Carcinogenicity :	not available	
Developmental toxicity/teratogenicity :	not available	
Toxicity to reproduction/fertility :	not available	
Specific target organ toxicity (STOT) - single exposure :	not available	
Specific target organ toxicity (STOT) - repeated exposure :	Assessment :	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard :	no data available	

SECTION 12: Ecological information

12.1. Toxicity

Information related to the product itself:

Fish toxicity :	LC50 > 5.000 mg/l (96 h, Danio rerio (zebra fish)) Method : OECD Test Guideline 203
Fish toxicity (chronic) :	not required
Daphnia toxicity :	EC50 > 100 mg/l (48 h, Daphnia magna (Water flea)) Method : OECD Test Guideline 202
Daphnia toxicity (chronic) :	not required
Algae toxicity :	EC50 (Growth rate) > 100 mg/l (72 h, Desmodesmus subspicatus (Scenedesmus subspicatus)) Method : OECD Test Guideline 201
Bacteria toxicity :	EC0 > 10 g/l (3 h, Pseudomonas putida) Method : OECD Test Guideline 209 Source : IRCHA

12.2. Persistence and degradability

Information related to the product itself:

Physico-chemical eliminability :	Readily biodegradable, according to appropriate OECD test.
Biodegradability :	76 % (29 d) Method : OECD Test Guideline 301B Readily biodegradable, according to appropriate OECD test.
Chemical oxygen demand (COD) :	240 mg/g

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Biochemical oxygen demand (BOD5) : 63,8 mg/g

12.3. Bioaccumulative potential

Information related to the product itself:

Bioaccumulation: Due to the low logPow bioaccumulation is not expected

12.4. Mobility in soil

Information related to the product itself:

Transport and distribution between environmental compartments : Not expected to adsorb on soil.

Behaviour in environmental compartments
not available

12.5. Results of PBT and vPvB assessment

Information related to the product itself:

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Information related to the product itself:

Additional ecotoxicological remarks

The product should not be allowed to enter drains, water courses or the soil.

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product

Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

Uncleaned packaging

Packaging that cannot be cleaned should be disposed of as product waste

SECTION 14: Transport information

Section 14.1. to 14.5.

ADR	not restricted
ADN	not restricted
RID	not restricted
IATA	not restricted
IMDG	not restricted

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14.6. Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code (International Bulk Chemicals Code)

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Other regulations

Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

15.2. Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Observe national and local legal requirements

Legend

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AOX	Adsorbable organic bound halogens
CAS	Chemical Abstracts Service
DMEL	Derived Minimal Effect Level (genotoxic substances)
DNEL	Derived No Effect Level
EC50	Half maximal effective concentration
GHS	Globally Harmonized System
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOEC	Non Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent, Bioaccumulative, Toxic
PEC	Predicted Environmental Concentration
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International Rule for Transport of Dangerous Substances by Railway

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SVHC
vPvB

Substances of Very High Concern
very Persistent and very Bioaccumulative

Decimal notation: "thousands" places are identified with a dot (for example, "2.000 mg/kg" means "two thousand mg/kg"). Decimal places are identified with a comma (for example, "1,35 g/cm³" means "one point three five g/cm³").

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