

Printing date 17.01.2017 Revision: 17.01.2017

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

· 1.1 Product identifier

· Trade name: Blasticidin S Hydrochloride

· Article number: 150477

• CAS Number: 3513-03-9

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

No further relevant information available.

· Application of the substance / the mixture Research use only.

· 1.3 Details of the supplier of the safety data sheet

• Manufacturer/Supplier: MP Biomedicals Europe Parc d'Innovation BP 50067 Rue Geiler de Kaysersberg Illkirch Cedex 67402

France

tel: +33 3.88.67.54.25 www.mpbio.com

· Further information obtainable from: Quality Control Department

· 1.4 Emergency telephone number:

:n° ORFILA" (01-45-42-59-59)

CHEMTREC: 1-800-424-9300 (1-703-527-3887)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 1 H300 Fatal if swallowed.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS06

- · Signal word Danger
- · Hazard statements

H300 Fatal if swallowed.

· Precautionary statements

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Printing date 17.01.2017 Revision: 17.01.2017

Trade name: Blasticidin S Hydrochloride

(Contd. of page 1)

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.
- _____

SECTION 3: Composition/information on ingredients

- · 3.1 Chemical characterisation: Substances
- · CAS No. Description

3513-03-9 Blasticidin S Hydrochloride

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling Thorough dedusting.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage: 2 8 °C
- Requirements to be met by storerooms and receptacles: No special requirements.

(Contd. on page 3)

Printing date 17.01.2017 Revision: 17.01.2017

Trade name: Blasticidin S Hydrochloride

(Contd. of page 2)

- · Further information about storage conditions: Desiccate.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- · Respiratory protection: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Not required.

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Appearance:

| Form: | Powder |
|---------|----------|
| Colour: | White |
| Odour: | Indetern |
| | |

· Odour: Indeterminate · Odour threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

Flash point: Not applicable.

· Flammability (solid, gaseous): Product is not flammable.

· Ignition temperature:

Decomposition temperature: Not determined.

(Contd. on page 4)

Printing date 17.01.2017 Revision: 17.01.2017

Trade name: Blasticidin S Hydrochloride

| | | (Contd. of page |
|-------------------------------------|---|-----------------|
| Self-igniting: | Not determined. | |
| Danger of explosion: | Product does not present an explosion hazard. | |
| Explosion limits: | | |
| Lower: | Not determined. | |
| Upper: | Not determined. | |
| Vapour pressure: | Not applicable. | |
| Density: | Not determined. | |
| Relative density | Not determined. | |
| Vapour density | Not applicable. | |
| Evaporation rate | Not applicable. | |
| Solubility in / Miscibility with | - | |
| water: | Not determined. | |
| Partition coefficient (n-octanol/wa | t ter): Not determined. | |
| Viscosity: | | |
| Dynamic: | Not applicable. | |
| Kinematic: | Not applicable. | |
| 9.2 Other information | No further relevant information available. | |

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

Fatal if swallowed.

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

Printing date 17.01.2017 Revision: 17.01.2017

Trade name: Blasticidin S Hydrochloride

(Contd. of page 4)

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

| · 14.1 UN-Number · ADR, IMDG, IATA | UN2811 |
|---------------------------------------|---|
| ADK, IMDG, IATA | UNZOTT |
| 14.2 UN proper shipping name | |
| ADR | 2811 TOXIC SOLID, ORGANIC, N.O.S. (Blasticidin Hydrochloride) |
| · IMDG, IATA | TOXIC SOLID, ORGANIC, N.O.S. (Blasticidin Hydrochloride) |
| 14.3 Transport hazard class(es) | |
| ADR, IMDG, IATA | |
| | |
| Class | 6.1 Toxic substances. |
| Label | 6.1 |
| 14.4 Packing group | |
| ADR, IMDG, IATA | II |
| 14.5 Environmental hazards: | Not applicable. |
| 14.6 Special precautions for user | Warning: Toxic substances. |
| Danger code (Kemler): | 6.1 |
| EMS Number: | F- A , S - A |

Printing date 17.01.2017 Revision: 17.01.2017

Trade name: Blasticidin S Hydrochloride

| | (Contd. of page : |
|---|---|
| · Stowage Category | В |
| · 14.7 Transport in bulk according to An Marpol and the IBC Code | nex II of Not applicable. |
| · Transport/Additional information: | |
| ·ADR | |
| · Limited quantities (LQ) | 500 g |
| · Excepted quantities (EQ) | Code: E4 |
| | Maximum net quantity per inner packaging: 1 g |
| | Maximum net quantity per outer packaging: 500 g |
| · IMDG | |
| · Limited quantities (LQ) | 500 g |
| · Excepted quantities (EQ) | Code: E4 |
| | Maximum net quantity per inner packaging: 1 g |
| | Maximum net quantity per outer packaging: 500 g |
| · UN "Model Regulation": | UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (BLASTICIDIN |
| | HYDROCHLORIDE), 6.1, II |

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Seveso category H1 ACUTE TOXIC
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 20 t
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Quality Control Dept.
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Acute Tox. 1: Acute toxicity – Category 1

ΙE