

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/03/2018

Reviewed on 06/21/2017

1 Identification

- **Product identifier**
- **Trade name:** Valinomycin
- **Article number:** 38076
- **CAS Number:**
2001-95-8
- **EC number:**
217-896-6
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SERVA Electrophoresis GmbH
Carl-Benz-Str. 7
D-69115 Heidelberg
Tel.: +49 6221 13840-0
FAX: +49 6221 13840-10
msds.info@serva.de
- **Information department:** Product Safety department Tel.: +49 6221 13840-35
- **Emergency telephone number:**
Medical Emergency Information in case of poisoning:
Poison Information Center Mainz - Phone: +49 (0) 6131 19240
(advisory service in German or English language)



2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06

Acute Tox. 1 H300 Fatal if swallowed.

Acute Tox. 1 H310 Fatal in contact with skin.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS06, GHS07

- **Signal word** Danger

- **Hazard statements**

Fatal if swallowed or in contact with skin.

Causes serious eye irritation.

- **Precautionary statements**

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF ON SKIN: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/03/2018

Reviewed on 06/21/2017

Trade name: Valinomycin

(Contd. of page 1)

Rinse mouth.

If eye irritation persists: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.

Store locked up.

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

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 4

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 4

Fire = 0

Reactivity = 0

· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** PBT - assessment not available.· **vPvB:** vPvB - assessment not available.

3 Composition/information on ingredients

· **Chemical characterization: Substances**· **CAS No. Description**

2001-95-8 Valinomycin

· **Identification number(s)**· **EC number:** 217-896-6· **Description:**· **Empirical formula:** $C_{54}H_{90}N_6O_{18}$ · **MW:** 1111.3

4 First-aid measures

· **Description of first aid measures**· **General information:** Immediately remove any clothing soiled by the product.· **After inhalation:** Supply fresh air; consult doctor in case of complaints.· **After skin contact:**

Immediate wash with copious amounts of water and soap; rinse thoroughly; seek medical advice.

· **After eye contact:**

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist immediately.

· **After swallowing:** Wash out the mouth and call a doctor.· **Information for doctor:**· **Most important symptoms and effects, both acute and delayed**

Coughing

Cramp

cardiac dysrhythmia

disorder of the CNS

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

US
(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/03/2018

Reviewed on 06/21/2017

Trade name: Valinomycin

(Contd. of page 2)

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂ extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Carbon monoxide and carbon dioxide
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Ensure adequate ventilation
Avoid contact with the eyes and skin.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with eyes and skin.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:**
Store away from oxidizing agents.
Store away from flammable liquids.
- **Further information about storage conditions:**
Store under lock and key and with access restricted to technical experts or their assistants only.
Keep receptacle tightly sealed and store in dry conditions.
Store receptacle in a well ventilated area.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/03/2018

Reviewed on 06/21/2017

Trade name: Valinomycin

(Contd. of page 3)

- **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.
 - Store protective clothing separately.
 - Avoid contact with the eyes and skin.
- **Breathing equipment:**
 - Short term filter device:
 - Filter P2
- **Protection of hands:**
 - Protective gloves
 - 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.
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
 - Natural rubber, NR
 - Nitrile rubber, NBR
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form:** Crystalline
 - Color:** White
 - Odor:** uncharacteristic
- **Change in condition**
 - Melting point/Melting range:** 187 - 191 °C (369 - 376 °F)
 - Boiling point/Boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Product is not flammable.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density:** Not determined.
- **Solubility in / Miscibility with**
 - Water:** Insoluble.
 - organic solvents:** Soluble in many organic solvents.
e.g. DMSO, chloroforme, ether

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/03/2018

Reviewed on 06/21/2017

Trade name: Valinomycin

(Contd. of page 4)

· **Other information** There are no more data available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
To avoid thermal decomposition do not overheat.
- **Possibility of hazardous reactions** Reacts with strong oxidizing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** In case of fire: See Section 5

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	4 mg/kg (rat)
Dermal	LD50	.5 mg/kg (rbt)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Danger through skin absorption.
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (Assessment by list): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

US

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/03/2018

Reviewed on 06/21/2017



Trade name: Valinomycin

(Contd. of page 5)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.

14 Transport information

- | | |
|---|--|
| · UN-Number | |
| · DOT, ADR, IMDG, IATA | UN2811 |
| · UN proper shipping name | |
| · ADR | 2811 TOXIC SOLID, ORGANIC, N.O.S. (Valinomycin) |
| · IMDG | TOXIC SOLID, ORGANIC, N.O.S. (Valinomycin) |
| · IATA | Toxic solid, organic, n.o.s. (Valinomycin) |
| · Transport hazard class(es) | |
| · DOT | |
|  | |
| · Class | 6.1 Toxic substances |
| · Label | 6.1 |
| · ADR, IMDG, IATA | |
|  | |
| · Class | 6.1 Toxic substances |
| · Label | 6.1 |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | I |
| · Environmental hazards: | Not applicable. |
| · Marine pollutant: | No |
| · Special precautions for user | Warning: Toxic substances |
| · Danger code (Kemler): | 66 |
| · EMS Number: | F-A,S-A |
| · Stowage Category | B |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR | |
| · Excepted quantities (EQ) | Code: E5
Maximum net quantity per inner packaging: 1 g
Maximum net quantity per outer packaging: 300 g |

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

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Trade name: Valinomycin

(Contd. of page 6)

- | | |
|-----------------------------------|--|
| · IMDG | |
| · Limited quantities (LQ) | 0 |
| · Excepted quantities (EQ) | Code: E5
Maximum net quantity per inner packaging: 1 g
Maximum net quantity per outer packaging: 300 g |
| · UN "Model Regulation": | UN2811, TOXIC SOLID, ORGANIC, N.O.S., 6.1, I |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Section 355 (extremely hazardous substances):** Substance is listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.
- **Proposition 65** Substance is not listed.
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenicity categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS06, GHS07
- **Signal word** Danger
- **Hazard statements**
Fatal if swallowed or in contact with skin.
Causes serious eye irritation.
- **Precautionary statements**
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
IF ON SKIN: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Specific treatment (see on this label).
Rinse mouth.
If eye irritation persists: Get medical advice/attention.
Take off immediately all contaminated clothing and wash it before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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:** Product safety department
- **Contact:** +49 6221 13840-35
- **Date of preparation / last revision** 05/03/2018 / 1
- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

(Contd. on page 8)

Safety Data Sheet

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Printing date 05/03/2018

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Trade name: Valinomycin

(Contd. of page 7)

*ICAO: International Civil Aviation Organisation**PBT: persistent, bioaccumulative, toxic substance (REACH)**vPvB: very persistent, very bioaccumulative substance (REACH)**REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals**CLP: Regulation on classification, labelling and packaging of substances and mixtures**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**DOT: US Department of Transportation**IATA: International Air Transport Association**ACGIH: American Conference of Governmental Industrial Hygienists**EINECS: European Inventory of Existing Commercial Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**NFPA: National Fire Protection Association (USA)**HMIS: Hazardous Materials Identification System (USA)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety & Health**TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**Acute Tox. 1: Acute toxicity – Category 1**Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A***. * Data compared to the previous version altered.**

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