

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 04.11.2024

Version number 3

Revision: 04.11.2024

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

- **1.1 Product identifier**
- **Trade name:** Valinomycin
- **Article number:** 38076
- **CAS Number:**
2001-95-8
- **EC number:**
217-896-6
- **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:** Laboratory chemicals
- **1.3 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
- **1.4 Emergency telephone number:**
Emergency medical information in case of poisoning
Poison Information Centre Mainz-Tel: +49 (0) 6131 19240
(Counselling in German and English)



SECTION 2: Hazards identification

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



GHS06

Acute Tox. 1 H300 Fatal if swallowed.

Acute Tox. 1 H310 Fatal in contact with skin.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008:**
The substance is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms:** GHS06
- **Signal word:** Danger
- **Hazard statements:**
H300+H310 Fatal if swallowed or in contact with skin.
- **Precautionary statements**
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P405 Store locked up.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment:**
- **PBT:** Concentration of substances classified as PBT: < 0,1%
- **vPvB:** concentration of substances classified as vPvB: < 0,1%

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· **Determination of endocrine-disrupting properties** No further relevant information available.

SECTION 3: Composition/information on ingredients

- **3.1 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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Wash off immediately with plenty of soap and water; rinse thoroughly; seek medical attention.
- **After eye contact:**
Rinse opened eye for several minutes with running water. Remove contact lenses if possible and continue rinsing. Consult an ophthalmologist immediately.
- **After swallowing:** Rinse out mouth and consult a doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
cardiac dysrhythmia
disorder of the CNS
- **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:**
 CO_2 , extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture:**
Formation of hazardous vapours and gases possible during heating or in case of fire.
In case of fire, the following can be formed, but not limited to:
Nitrogen oxides (NOx)
Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Ensure adequate ventilation
Avoid formation of dust.
Avoid contact with eyes and skin.
- **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 section 13.

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*Pick up mechanically.***· 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:***Ensure good ventilation/exhaustion at the workplace.**Open and handle receptacle with care.**Avoid contact with eyes and skin.**Prevent formation of dust.***· Information about protection against explosions and fires:** *Keep ignition sources away - Do not smoke.***· 7.2 Conditions for safe storage, including any incompatibilities****· Storage****· Requirements to be met by storerooms and receptacles:** *Store only in the original receptacle.***· Information about storage in one common storage facility:** *Store away from oxidising agents.***· Further information about storage conditions:***Store under lock and key and with access restricted to technical experts or their assistants only.**Store containers tightly closed and dry.***· 7.3 Specific end use(s):** *No further relevant information available.***SECTION 8: Exposure controls/personal protection****· 8.1 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.***· 8.2 Exposure controls****· Appropriate engineering controls:** *No further data; see section 7.***· Individual protection measures, such as personal protective equipment:****· General protective and hygienic measures:***Keep away from foodstuffs, beverages and feed.**Store protective clothing separately.**Immediately remove all soiled and contaminated clothing**Avoid contact with the eyes and skin.**Wash hands before breaks and at the end of work.***· Breathing equipment:***Short term filter device:**Filter P2.***· Hand protection:***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*

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Nitrile rubber, NBR

- **Eye/face protection:** Safety glasses
- **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information:

- | | |
|--|---|
| · Physical state: | Solid. |
| · Colour: | White |
| · Odour: | uncharacteristic |
| · Odour threshold: | not determined. |
| · Melting point/freezing point: | 187-191 °C |
| · Boiling point or initial boiling point and boiling range: | No information available |
| · Flammability: | No information available |
| · Lower and upper explosion limit: | |
| · Lower: | No information available |
| · Upper: | No information available |
| · Flash point: | No information available |
| · Decomposition temperature: | No information available |
| · pH: | No information available |
| · Viscosity: | |
| · Kinematic viscosity: | No information available |
| · Dynamic viscosity: | No information available |
| · Solubility: | |
| · Water: | Insoluble |
| · Organic solvents: | Soluble in many organic solvents
e.g. DMSO, chloroforme, ether |
| · Partition coefficient n-octanol/water (log value): | No information available |
| · Vapour pressure: | No information available |
| · Density and/or relative density: | |
| · Density: | No information available |
| · Relative density: | No information available |
| · Particle characteristics | No information available |

· 9.2 Other information

- | | |
|--|---|
| · Appearance: | Further physico-chemical data are not available. |
| · Form: | Crystalline |
| · Important information on protection of health and environment, and on safety: | |
| · Explosive properties: | The product is not explosive, but the formation of explosive dust/air mixtures is possible. |
| · Molecular weight | 1,111.3 g/mol |

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 and stored according to specifications.
- **10.3 Possibility of hazardous reactions:** No further relevant information available.
- **10.4 Conditions to avoid:** Avoid high temperatures, flames and sparks
- **10.5 Incompatible materials:** Avoid contact with strong oxidising agents.

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· **10.6 Hazardous decomposition products:** In case of fire: see section 5

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**

· **Acute toxicity:** Fatal if swallowed or in contact with skin.

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

Oral	LD50	4 mg/kg (rat)
Dermal	LD50	5 mg/kg (rabbit)

· **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.

· **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.

· **11.2 Information on other hazards:**

· **Endocrine disrupting properties:**

The product does not contain substances with endocrine disrupting properties.

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.

· **12.5 Results of PBT and vPvB assessment:**

· **PBT:** PBT - assessment not available.

· **vPvB:** vPvB - assessment not available.

· **12.6 Endocrine disrupting properties:** For information on endocrine disrupting properties see section 11.

· **12.7 Other adverse effects:**

· **Additional ecological information:**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system.

Water danger class 3 (German Regulation) (Assessment by list): extremely hazardous for water.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Dispose of in accordance with official regulations.

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

· **Uncleaned packagings:**

· **Recommendation:**

Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.

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SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR, IMDG, IATA	UN2811
· 14.2 UN proper shipping name	
· ADR	2811 TOXIC SOLID, ORGANIC, N.O.S. (Valinomycin)
· IMDG, IATA	TOXIC SOLID, ORGANIC, N.O.S. (Valinomycin)
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
	
· Class:	6.1 Toxic substances.
· Label:	6.1
· 14.4 Packing group	
· ADR, IMDG, IATA	I
· 14.5 Environmental hazards	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Toxic substances.
· Hazard identification number (Kemler code):	66
· EMS Number:	F-A,S-A
· Stowage Category	B
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· 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
· Transport category	1
· Tunnel restriction code	C/E
· 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":	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (VALINOMYCIN), 6.1, I

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Poisons Act
- Regulated explosives precursors Substance is not listed.
- Regulated poisons Substance is not listed.
- Reportable explosives precursors Substance is not listed.
- Reportable poisons Substance is not listed.

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- **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
 - **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
 - **REGULATION (EU) 2019/1148**
 - **Annex I - RESTRICTED EXPLOSIVES PRECURSORS** (Upper limit value for the purpose of licensing under Article 5(3))
Substance is not listed.
 - **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
 - **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
 - **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
Substance is not listed.
 - **National regulations:**
 - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| I | 80-100 |
- **Water hazard class:** Water danger class 3 (Assessment by list): extremely hazardous for water.
 - **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:** Product Safety Department
- **Contact:** +49 6221 13840-35
- **Date of previous version:** 21.06.2017
- **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)
 - ICAO: International Civil Aviation Organisation
 - PBT: persistent, bioaccumulative, toxic substance (UK REACH)
 - vPvB: very persistent, very bioaccumulative substance (UK REACH)
 - UK REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
 - GB CLP: Regulation on classification, labelling and packaging of substances and mixtures
 - bw: body weight
 - ADR: Accord relatif au transport international 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
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Acute Tox. I: Acute toxicity – Category 1

GB