

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 06 Mar 2024

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

Emamectin B1a

1.1. Catalog No.:

679132

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

Hazard statements
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H318 - Causes serious eye damage
H331 - Toxic if inhaled
H370 - Causes damage to organs
H372 - Causes damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects

2.2. Label elements

2.2.1. Pictogram



2.2.2.

Signal word

Danger

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P391 - Collect spillage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

2.3. Other hazards

No information available.

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Classification

according to

Regulation (EC) No.

1272/2008 [CLP]

Acute Tox. 3 (H301)

Acute Tox. 3 (H311)

Acute Tox. 3 (H331)

Eye Dam. 1 (H318)

STOT SE 1 (H370)

STOT RE 1 (H372)

Aquatic Acute 1

(H400)

Aquatic Chronic 1

(H410)

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

3.1.1. Formula

C₄₉H₇₅NO₁₃

3.1.2. Molecular Weight (g/mol)

886.12

3.1.3. CAS-No.

121124-29-6

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention. If breathing has stopped, give artificial respiration.

Get medical attention immediately. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen.

Eye contact Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area.

Skin contact Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information.

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

Symptoms Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

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

Note to doctors Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid generation of dust. Do not breathe dust. Keep people away from and upwind of spill/leak.
Other information Refer to protective measures listed in Sections 7 and 8.
For emergency responders Use personal protection recommended in Section 8.
- 6.2. Environmental precautions
Environmental precautions Prevent further leakage or spillage if safe to do so.
- 6.3. Methods and material for containment and cleaning up
Methods for containment Prevent further leakage or spillage if safe to do so.
Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.
Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.
- 6.4. Reference to other sections
Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

- 7.1. Precautions for safe handling
Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Do not breathe dust. Avoid generation of dust. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation.
General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended.
Wash hands before breaks and immediately after handling the product. Do not breathe dust. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.
- 7.2. Conditions for safe storage, including any incompatibilities
Storage Conditions Please refer to the manufacturers certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.
- 7.3. Specific end use(s)
Identified uses
Risk Management Methods: The information required is contained in this Safety Data Sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. Control parameters
Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Biological occupational exposure limits
This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies
Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC)
No information available.
- 8.2. Exposure controls
Personal protective equipment
Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Tight sealing safety goggles.
Hand protection The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear suitable gloves. Impervious gloves.
Glove material: Wear protective butyl rubber gloves

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.
Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended.
Wash hands before breaks and immediately after handling the product. Do not breathe dust. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.
Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Solid

Appearance Solid

Colour off-white

Odour No information available.

Odour threshold No information available

9.2. Other information

Property Values

Melting point / freezing point 141 - 146 °C

Boiling point / boiling range No data available

Flammability (solid, gas) No data available

Flammability Limit in Air

Upper flammability or explosive limits

No data available

Lower flammability or explosive limits

No data available

Flash point No data available

Autoignition temperature No data available

Decomposition temperature

pH No data available

pH (as aqueous solution) No data available No information available

Kinematic viscosity No data available

Dynamic viscosity No data available

Water solubility 0.024 g/L

Solubility(ies) No data available

Partition coefficient 5.0

Vapour pressure No data available

Relative density 1.23

Bulk density No data available

Liquid Density No data available

Relative vapour density No data available

Particle characteristics

Particle Size No information available

Particle Size Distribution No information available

9.2. Other information

Molecular weight 886.1

Molecular formula C₄₉ H₇₅ N O₁₃

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

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

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Toxic by inhalation. (based on components).

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation. Toxic in contact with skin. (based on components).

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Toxic if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing. Difficulty in breathing.

Numerical measures of toxicity

No information available

Acute toxicity

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE).

Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

IATA

14.1 UN number or ID number UN2811

14.2 UN proper shipping name Toxic solid, organic, n.o.s. (Emamectin B1a)

14.3 Transport hazard class(es) 6.1

14.4 Packing group III

Description UN2811, Toxic solid, organic, n.o.s. (Emamectin B1a), 6.1, III

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions A3, A5

ERG Code 6L

IMDG

14.1 UN number or ID number UN2811

14.2 UN proper shipping name Toxic solid, organic, n.o.s. (Emamectin B1a)

14.3 Transport hazard class(es) 6.1

14.4 Packing group III

Description UN2811, Toxic solid, organic, n.o.s. (Emamectin B1a), 6.1, III, Marine pollutant

14.5 Marine pollutant P

Environmental hazards Yes

14.6 Special precautions for user

Special Provisions 223, 274

EmS-No F-A, S-A No information available

14.7 Maritime transport in bulk

according to IMO instruments

No information available

RID

14.1 UN number or ID number UN2811

14.2 UN proper shipping name Toxic solid, organic, n.o.s. (Emamectin B1a)

14.3 Transport hazard class(es) 6.1

14.4 Packing group III

Description UN2811, Toxic solid, organic, n.o.s. (Emamectin B1a), 6.1, III, Environmentally Hazardous

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions 274, 614

Classification code T2

ADR

14.1 UN number or ID number UN2811

14.2 UN proper shipping name Toxic solid, organic, n.o.s. (Emamectin B1a)
14.3 Transport hazard class(es) 6.1
14.4 Packing group III
Description UN2811, Toxic solid, organic, n.o.s. (Emamectin B1a), 6.1, III, (E), Environmentally Hazardous
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274, 614
Classification code T2
Tunnel restriction code (E)

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Water hazard class (WGK) strongly hazardous to water (WGK 3)
European Union
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
Authorisations and/or restrictions on use:
This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)
This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)
DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors
Not applicable
Persistent Organic Pollutants
Not applicable
Dangerous substance category per Seveso Directive (2012/18/EU)
H2 - ACUTE TOXIC
H3 - STOT SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1
Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable
15.2. Chemical safety assessment
Chemical Safety Report A Chemical Safety Assessment has been carried out for this substance

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!