

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 27 Feb 2024

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

### 1.1. Product name:

Enamectin benzoate

### 1.1. Catalog No.:

672905

### 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

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 3), H311  
Eye irritation (Category 2), H319  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410 Classification according to EU Directives 67/548/EEC or 1999/45/EC  
Xn Harmful R21  
T Toxic R23, R25  
Xi Irritant R36  
N Dangerous for the environment  
R50/53, R57, R58

### 2.2. Label elements

#### 2.2.1. Pictogram



## 2.2.2.

### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 Pictogram Signal word Danger

Hazard statement(s)

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

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

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

P311 Call a POISON CENTER or doctor/ physician.

Supplemental Hazard

Statements

none

2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical characterization : Natural product

Synonyms : (4''R)-4''-Deoxy-4''-(methylamino)avermectin B1 benzoate

CAS-No. : 155569-91-8

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

Emamectin-benzoate

CAS-No.

155569-91-8

Acute Tox. 3; Eye Irrit. 2;

Aquatic Acute 1; Aquatic

Chronic 1; H301 + H311 +

H331, H319, H410

<= 100 %

Hazardous ingredients according to Directive 1999/45/EC

Component Classification Concentration

Emamectin-benzoate

CAS-No.

155569-91-8

T, N, R21 - R23 - R25 - R36 -

R50/53 - R57 - R58

<= 100 %

### 3.1.1. Formula

-

### 3.1.2. Molecular Weight (g/mol)

0.00

### 3.1.3. CAS-No.

155569-91-8

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure

adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.  
For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13

## 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

#### 7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Components with workplace control parameters

#### 8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry Hands Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance Form: powder  
Colour: beige
  - b) Odour no data available
  - c) Odour Threshold no data available
  - d) pH no data available
  - e) Melting point/freezing point  
no data available
  - f) Initial boiling point and boiling range  
no data available
  - g) Flash point no data available
  - h) Evaporation rate no data available
  - i) Flammability (solid, gas) no data available
  - j) Upper/lower flammability or explosive limits  
no data available
  - k) Vapour pressure no data available
  - l) Vapour density no data available
  - m) Relative density no data available
  - n) Water solubility no data available
  - o) Partition coefficient: noctanol/water  
log Pow: 5,77
  - p) Auto-ignition temperature  
no data available
  - q) Decomposition temperature  
no data available
  - r) Viscosity no data available
  - s) Explosive properties no data available
  - t) Oxidizing properties no data available
- ### 9.2 Other safety information
- no data available

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity  
no data available
- 10.2 Chemical stability  
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions  
no data available
- 10.4 Conditions to avoid  
no data available
- 10.5 Incompatible materials  
no data available
- 10.6 Hazardous decomposition products  
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects  
Acute toxicity  
LD50 Oral - rat - 76 mg/kg  
LC50 Inhalation - rat - female - 4 h - 0,663 mg/l  
LC50 Inhalation - rat - male - 4 h - 1.049,0 mg/l

LD50 Dermal - rat - 500,0 - 2.000,0 mg/kg

Skin corrosion/irritation

Skin - rabbit

Result: Mild skin Irritation Serious eye damage/eye irritation

Eyes - rabbit

Result: Moderate eye irritation

Respiratory or skin sensitisation

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Reproductive toxicity - rat - Oral

Maternal Effects: Other effects. Effects on Newborn: Growth statistics (e.g., reduced weight gain). Effects on Newborn: Behavioral.

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: CL1203005

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0,17 mg/l - 96,0 h

Toxicity to daphnia and

other aquatic

invertebrates

EC50 - Daphnia - 0,001 mg/l - 48 h

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product

#### 14. TRANSPORT INFORMATION

14.1 UN number  
ADR/RID: 2811 IMDG: 2811 IATA: 2811  
14.2 UN proper shipping name  
ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Emamectin-benzoate)  
IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Emamectin-benzoate)  
IATA: Toxic solid, organic, n.o.s. (Emamectin-benzoate)  
14.3 Transport hazard class(es)  
ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1  
14.4 Packaging group  
ADR/RID: III IMDG: III IATA: III  
14.5 Environmental hazards  
ADR/RID: yes IMDG Marine pollutant: yes IATA: no  
14.6 Special precautions for user  
no data available

#### 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.  
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
no data available  
15.2 Chemical Safety Assessment  
For this product a chemical safety assessment was not carried out

#### 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!