

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: **4880**
Version: **GHS 2.0 en**
Replaces version of: 2017-01-25
Version: (GHS 1)

date of compilation: 2017-01-25
Revision: 2022-03-14

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

1.1 Product identifier

Identification of the substance **Yersinia Supplement** lyophilised
Article number 4880

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

Relevant identified uses: Laboratory chemical
Laboratory and analytical use
Uses advised against: Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone:+49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet: :Department Health, Safety and Environment

e-mail (competent person): **sicherheit@carlroth.de**

1.4 Emergency telephone number

| Name | Street | Postal code/city | Telephone | Website |
|--|-----------------|--------------------|-----------|---------|
| NSW Poisons Information Centre Childrens Hospital | Hawkesbury Road | 2145 Westmead, NSW | 131126 | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

| Section | Hazard class | Cat-egory | Hazard class and category | Hazard statement |
|---------|-----------------------------------|-----------|---------------------------|------------------|
| 3.2 | Skin corrosion/irritation | 2 | Skin Irrit. 2 | H315 |
| 3.3 | Serious eye damage/eye irritation | 2A | Eye Irrit. 2A | H319 |
| 3.4R | Respiratory sensitisation | 1 | Resp. Sens. 1 | H334 |
| 3.4S | Skin sensitisation | 1 | Skin Sens. 1 | H317 |

For full text of abbreviations: see SECTION 16

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

2.2 Label elements

Labelling

Signal word

Danger

Pictograms

GHS08



Hazard statements

| | |
|------|---|
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |

Precautionary statements

Precautionary statements - prevention

| | |
|------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray |
| P280 | Wear protective gloves |

Precautionary statements - response

| | |
|----------------|---|
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention |
| P337+P313 | If eye irritation persists: Get medical advice/attention |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician |

Precautionary statements - disposal

| | |
|------|--|
| P501 | Dispose of contents/container to industrial combustion plant |
|------|--|

Hazardous ingredients for labelling: Cefsulodin sodium salt, Novobiocin sodium salt

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Description of the mixture

| Name of sub-stance | Identifier | Wt% | Classification acc. to GHS | Pictograms | Notes |
|------------------------|-------------------|----------|---|------------|-------|
| Cefsulodin sodium salt | CAS No 52152-93-9 | 5 - < 10 | Skin Irrit. 2 / H315 Eye Irrit. 2A / H319 Resp. Sens. 1 / H334 Skin Sens. 1 / H317 STOT SE 3 / H335 | | |
| Triclosan | CAS No 3380-34-5 | 1 - 2.5 | Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 | | |
| Novobiocin sodium salt | CAS No 1476-53-5 | 1 - 2.5 | Eye Irrit. 2A / H319 Skin Sens. 1 / H317 | | |

For full text of abbreviations: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. After contact with skin, wash immediately with plenty of water. In case of skin reactions, consult a physician. In case of skin irritation, consult a physician.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Irritation, Allergic reactions, Cough, Dyspnoea

4.3 Indication of any immediate medical attention and special treatment needed

none

Yersinia Supplement lyophilised

article number: 4880

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings
water, foam, dry extinguishing powder, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂),
May produce toxic fumes of carbon monoxide if burning.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe dust.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

Advice on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

Yersinia Supplement lyophilised

article number: 4880

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Avoid dust formation.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Keep in a cool place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 2 – 8 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

This information is not available.

| Relevant DNELs of components of the mixture | | | | | | |
|---|-----------|-----------|---------------------|------------------------------------|-------------------|----------------------------|
| Name of substance | CAS No | End-point | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| Triclosan | 3380-34-5 | DNEL | 3 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Triclosan | 3380-34-5 | DNEL | 2.8 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |

| Relevant PNECs of components of the mixture | | | | | | |
|---|-----------|-----------|-----------------|-------------------|------------------------------|------------------------------|
| Name of substance | CAS No | End-point | Threshold level | Organism | Environmental compartment | Exposure time |
| Triclosan | 3380-34-5 | PNEC | 0.843 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| Triclosan | 3380-34-5 | PNEC | 0.169 µg/l | aquatic organisms | marine water | short-term (single instance) |
| Triclosan | 3380-34-5 | PNEC | 0.11 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Triclosan | 3380-34-5 | PNEC | 1 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Triclosan | 3380-34-5 | PNEC | 0.1 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

| Relevant PNECs of components of the mixture | | | | | | |
|---|-----------|-----------|-----------------|-----------------------|---------------------------|------------------------------|
| Name of substance | CAS No | End-point | Threshold level | Organism | Environmental compartment | Exposure time |
| Triclosan | 3380-34-5 | PNEC | 0.196 mg/kg | terrestrial organisms | soil | short-term (single instance) |

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

NBR (Nitrile rubber)

• material thickness

>0,11 mm

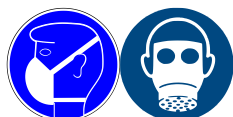
• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | solid |
| Form | - |
| Colour | colourless |
| Odour | odourless |
| Melting point/freezing point | not determined |
| Boiling point or initial boiling point and boiling range | not determined |
| Flammability | this material is combustible, but will not ignite readily |
| Lower and upper explosion limit | not determined |
| Flash point | not applicable |
| Auto-ignition temperature | not determined |
| Decomposition temperature | not relevant |
| pH (value) | 7 (20 °C) |
| Kinematic viscosity | not relevant |

Solubility(ies)

Water solubility (soluble)

Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Vapour pressure not determined

Density and/or relative density

Density not determined

Relative vapour density information on this property is not available

Particle characteristics No data available.

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Other safety characteristics:

There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser, Acids, Alkalis, Bases

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity of components of the mixture | | | | | |
|---|------------|----------------|----------|--------------|---------|
| Name of substance | CAS No | Exposure route | Endpoint | Value | Species |
| Cefsulodin sodium salt | 52152-93-9 | oral | LD50 | 15,000 mg/kg | rat |
| Triclosan | 3380-34-5 | oral | LD50 | >5,000 mg/kg | rat |
| Triclosan | 3380-34-5 | dermal | LD50 | >6,000 mg/kg | rabbit |
| Novobiocin sodium salt | 1476-53-5 | oral | LD50 | 3,500 mg/kg | rat |

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

Data are not available.

• If in eyes

Causes serious eye irritation

• If inhaled

May produce an allergic reaction, cough, Dyspnoea

• If on skin

causes skin irritation, May produce an allergic reaction, pruritis, localised redness

• Other information

none

11.2 Endocrine disrupting properties

None of the ingredients are listed.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

| Aquatic toxicity (acute) of components of the mixture | | | | | |
|---|-----------|----------|------------|-----------------------|---------------|
| Name of sub-stance | CAS No | Endpoint | Value | Species | Exposure time |
| Triclosan | 3380-34-5 | LC50 | 4.37 mg/l | fish | 96 h |
| Triclosan | 3380-34-5 | EC50 | >0.18 mg/l | aquatic invertebrates | 48 h |
| Triclosan | 3380-34-5 | ErC50 | 0.17 mg/l | algae | 72 h |

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Aquatic toxicity (chronic) of components of the mixture

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|-------------------|-----------|----------|---------|----------------|---------------|
| Triclosan | 3380-34-5 | EC50 | 11 mg/l | microorganisms | 3 h |

Biodegradation

Data are not available.

12.2 Process of degradability

Degradability of components of the mixture

| Name of substance | CAS No | Process | Degradation rate | Time | Method | Source |
|-------------------|-----------|---------------------------|------------------|------|--------|--------|
| Triclosan | 3380-34-5 | carbon dioxide generation | 13.5 % | 24 d | | ECHA |
| Triclosan | 3380-34-5 | oxygen depletion | 18 % | 28 d | | ECHA |

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

| Name of substance | CAS No | BCF | Log KOW | BOD5/COD |
|------------------------|-----------|-----|----------------------------|----------|
| Triclosan | 3380-34-5 | | 4.8 (pH value: 6.7, 25 °C) | |
| Novobiocin sodium salt | 1476-53-5 | | 2.9 (25 °C) | |

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number

| | |
|-----------|------------|
| UN RTDG | UN 3077 |
| IMDG-Code | UN 3077 |
| ICAO-TI | UN 3077 |

14.2 UN proper shipping name

| | |
|--|---|
| UN RTDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| IMDG-Code | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| ICAO-TI | Environmentally hazardous substance, solid, n.o.s. |
| Technical name (hazardous ingredients) | Triclosan |

14.3 Transport hazard class(es)

| | |
|-----------|---|
| UN RTDG | 9 |
| IMDG-Code | 9 |
| ICAO-TI | 9 |

14.4 Packing group

| | |
|-----------|-----|
| UN RTDG | III |
| IMDG-Code | III |
| ICAO-TI | III |

14.5 Environmental hazards

| | |
|--|--------------------------------------|
| | hazardous to the aquatic environment |
| Environmentally hazardous substance (aquatic environment): | Triclosan |

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Transport information National regulations Additional information (UN RTDG)

| | |
|------------------------------|---|
| UN number | 3077 |
| Class | 9 |
| Environmental hazards | Yes Hazardous to the aquatic environment |
| Packing group | III |
| Danger label(s) | 9 Fish and tree |



| | |
|---------------------------------|-------------------------------|
| Special provisions (SP) | 274, 331, 335, 375 UN RTDG |
| Excepted quantities (EQ) | E1 UN RTDG |
| Limited quantities (LQ) | 5 kg UN RTDG |

International Maritime Dangerous Goods Code (IMDG) - Additional information

| | |
|--|---|
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| Particulars in the shipper's declaration | UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (contains: Triclosan), 9, III |
| Marine pollutant | YES (hazardous to the aquatic environment), (Triclosan) |
| Danger label(s) | 9, "Fish and tree" |



| | |
|--------------------------|-------------------------|
| Special provisions (SP) | 274, 335, 966, 967, 969 |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 kg |
| EmS | F-A, S-F |
| Stowage category | A |

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

| | |
|--|---|
| Proper shipping name | Environmentally hazardous substance, solid, n.o.s. |
| Particulars in the shipper's declaration | UN3077, Environmentally hazardous substance, solid, n.o.s., (contains: Triclosan), 9, III |
| Environmental hazards | YES (hazardous to the aquatic environment) |
| Danger label(s) | 9, "Fish and tree" |



| | |
|--------------------------|-----------------------------|
| Special provisions (SP) | A97, A158, A179, A197, A215 |
| Excepted quantities (EQ) | E1 |

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Limited quantities (LQ)

30 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

There is no additional information.

National regulations(Australia)

Australian Inventory of Chemical Substances(AICS)

All ingredients are listed or exempt from listing.

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

| Country | Inventory | Status |
|---------|------------|--------------------------------|
| AU | AICS | all ingredients are listed |
| CA | DSL | not all ingredients are listed |
| CA | NDSL | not all ingredients are listed |
| CN | IECSC | not all ingredients are listed |
| EU | ECSI | all ingredients are listed |
| EU | REACH Reg. | not all ingredients are listed |
| JP | CSCL-ENCS | not all ingredients are listed |
| JP | ISHA-ENCS | not all ingredients are listed |
| KR | KECI | not all ingredients are listed |
| MX | INSQ | not all ingredients are listed |
| NZ | NZIoC | all ingredients are listed |
| PH | PICCS | not all ingredients are listed |
| TR | CICR | not all ingredients are listed |
| TW | TCSI | all ingredients are listed |
| US | TSCA | not all ingredients are listed |

Legend

| | |
|------------|---|
| AICS | Australian Inventory of Chemical Substances |
| CICR | Chemical Inventory and Control Regulation |
| CSCL-ENCS | List of Existing and New Chemical Substances (CSCL-ENCS) |
| DSL | Domestic Substances List (DSL) |
| ECSI | EC Substance Inventory (EINECS, ELINCS, NLP) |
| IECSC | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ | National Inventory of Chemical Substances |
| ISHA-ENCS | Inventory of Existing and New Chemical Substances (ISHA-ENCS) |
| KECI | Korea Existing Chemicals Inventory |
| NDSL | Non-domestic Substances List (NDSL) |
| NZIoC | New Zealand Inventory of Chemicals |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances (PICCS) |
| REACH Reg. | REACH registered substances |
| TCSI | Taiwan Chemical Substance Inventory |
| TSCA | Toxic Substance Control Act |

15.2 Chemical Safety Assessment

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation: Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

Restructuring: section 9, section 14

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|---|--|-----------------|
| 2.1 | | Classification acc. to GHS: change in the listing (table) | yes |
| 2.1 | Remarks: For full text of Hazard- and EU Hazard-statements: see SECTION 16. | | yes |
| 2.2 | | Pictograms: change in the listing (table) | yes |
| 2.2 | | Precautionary statements - prevention: change in the listing (table) | yes |
| 2.2 | | Precautionary statements - response: change in the listing (table) | yes |
| 2.2 | Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger | | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | contains: Cefsulodin sodium salt, Novobiocin sodium salt | | yes |
| 2.3 | Other hazards: There is no additional information. | Other hazards | yes |
| 2.3 | | Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB. | yes |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-------|--|
| BCF | Bioconcentration factor |
| BOD | Biochemical Oxygen Demand |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| COD | Chemical oxygen demand |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: 4880

| Abbr. | Descriptions of used abbreviations |
|-------------|--|
| DNEL | Derived No-Effect Level |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| Eye Dam. | Seriously damaging to the eye |
| Eye Irrit. | Irritant to the eye |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| LD50 | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval |
| log KOW | n-Octanol/water |
| MARPOL | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant") |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| Resp. Sens. | Respiratory sensitisation |
| Skin Corr. | Corrosive to skin |
| Skin Irrit. | Irritant to skin |
| Skin Sens. | Skin sensitisation |
| STOT SE | Specific target organ toxicity - single exposure |
| UN RTDG | UN Recommendations on the Transport of Dangerous Good |
| vPvB | Very Persistent and very Bioaccumulative |

Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Safety data sheet

acc. to Safe Work Australia - Code of Practice



Yersinia Supplement lyophilised

article number: **4880**

Classification procedure

Physical and chemical properties. The classification is based on tested mixture.
Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text |
|------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.