

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

1.1 Product identifiers

Product Name: Veratridine

Catalog Number:

CAS Number: 71-62-5 EC Number: 200-758-4

IUPAC Name: $4\alpha,9$ -Epoxy- 3β -veratroyloxy- 5β -cevan- $4\beta,12,14,16\beta,17,20$ -hexaol 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company FERMENTEK

4 Yatziv street, POB 47120

Jerusalem 97800,

Israel

Tel: +972 2 5853953

Fax: +972 2 5853943

eMail: fermentek@fermentek.com Website: www.fermentek.com

This company is the manufacturer of the product, and the supplier of the safety data sheet

1.4 Emergency Telephone number

For chemical emergency spill, leak, fire, exposure, or accident call CHEMTREC day or night: Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP]

Acute Toxicity, oral - Category 2

Acute Toxicity, dermal - Category 2

Skin Corrosion/Irritation - Category 2

Serious eye damage/eye irritation - Category 2

Acute Toxicity, inhalation - Category 2

Specific Target Organ Toxicity, SE, respiratory tract irritation - Category 3

Reproductive Toxicity - Category 2

Classification according to EU Directives DSD 67/548/EEC or DPD 1999/45/EC

Very toxic by inhalation.

Very toxic in contact with skin.

Very toxic if swallowed.

Irritating to eyes.

Irritating to respiratory system.

Irritating to skin.

Possible risk of impaired fertility.

Possible risk of harm to the unborn child

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 [CLP]

Pictogram(s):

Signal word: Danger

Hazard statement(s):

H300 Fatal if swallowed

H310 Fatal in contact with skin

H315 Causes skin irritation

H319 Causes serious eye irritation

H330 Fatal if inhaled

H335 May cause respiratory irritation

H361 Suspected of damaging fertility or the unborn child

Precautionary statement(s):

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



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P262 Do not get in eyes, on skin, or on clothing

P264 Wash hands thoroughly after handling

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

P284 Wear respiratory protection

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P302+350 IF ON SKIN: Gently wash with soap and water

P302+352 IF ON SKIN: Wash with soap and water

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove

contact lenses if present and easy to do so - continue rinsing

P308+313 If exposed or concerned: Get medical advice/attention

P333+313 If skin irritation or a rash occurs: Get medical advice/attention

According to European Directive 67/548/EEC as amended



Hazard symbol(s):

R-phrase(s):

R26 Very toxic by inhalation

R27 Very toxic in contact with skin

R28 Very toxic if swallowed

R36 Irritating to eyes

R37 Irritating to respiratory system

R38 Irritating to skin

R62 Possible risk of impaired fertility

R63 Possible risk of harm to the unborn child

S-phrase(s):

S22 Do not breathe dust

S24/25 Avoid contact with skin and eyes

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S28 After contact with skin, wash immediately with plenty of water

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

S38 In case of insufficient ventilation wear suitable respiratory equipment

S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

S46 If swallowed, seek medical advice immediately and show this container or label

S63 In case of accident by inhalation: remove casualty to fresh air and keep at rest

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a pure compound, not a mixture.

3.1 Substances

Product Name: Veratridine

Formula: C36H51NO11 Molecular Weight: 673.79 CAS Number: 71-62-5 EC Number: 200-758-4

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a doctor and show this safety data sheet.

If inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In case of skin contact

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

In case of eye contact

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

If swallowed



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Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed

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

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

In combustion, may emit toxic fumes.

5.3 Precautions for fire-fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTIAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities.

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

Recommended storage temperature: Store at -20°C

7.3 Specific end uses

Use in a laboratory fume hood where possible.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place.

Ensure laboratory is equipped with a safety shower and eye wash station.

Personal protective equipment

Eye/face protection



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Use appropriate safety glasses.

Skin protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body protection

Wear appropriate protective clothing.

Respiratory protection

If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance White solid

Solubility Soluble to 50 mM in DMSO or Ethanol (33.6 gr/lit)

Auto-ignition temperature Unavailable Boiling point / range Unavailable Decomposition temperature Unavailable Evaporation rate Unavailable Explosive properties Unavailable Flammability (solid, gas) Unavailable Unavailable Flash point Melting / freezing point Unavailable Odor Unavailable Odor threshold Unavailable Unavailable Oxidising properties Partition coefficient Unavailable pΗ Unavailable Relative density Unavailable Flammability or explosive limits Unavailable Vapor density Unavailable Vapor pressure Unavailable

9.2 Other safety information

Unavailable

10. STABILITY AND REACTIVITY

10.1 Reactivity

Viscosity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.

Unavailable

Decomposition may occur on exposure to conditions or materials listed below

10.4 Conditions to avoid

Heat, moisture.

10.5 Incompatible materials

Strong acids/alkalis, strong oxidising/reducing agents.

10.6 Hazardous decomposition products

In combustion may emit toxic fumes. No known decomposition information.





11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Rat, Intraperitomeal, - LD50: 3500ug/kg; Mouse, Intraperitomeal LD50: 1350ug/kg; Mouse, Subcutaneous, LD50: 6300ug/kg

Skin corrosion/irritation

Classified based on available data

Serious eye damage/irritation

Classified based on available data

Respiratory or skin sensitization

Classified based on available data

Germ cell mutagenicity

Classified based on available data

Carcinogenicity

Classified based on available data

Reproductive toxicity

Classified based on available data

Specific target organ toxicity - single exposure

Classified based on available data

Specific target organ toxicity - repeated exposure

Classified based on available data

Aspiration hazard

Classified based on available data

Symptoms / Routes of exposure

Inhalation:

There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Severe poisoning causes severe shortness of breath and shock, with blueness of the lips, tongue, ears, face, hands and feet.

Ingestion:

There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. Blood may be vomited. There may be vomiting and diarrhea. There may be loss of consciousness. Severe poisoning can cause unconsciousness and severe and persistent nausea and vomiting. Severe poisoning can cause shock, unconsciousness and convulsions.

Skin:

Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Absorption through the skin may be fatal.

Eyes:

There may be pain and redness. The vision may become blurred. The eyes may water profusely. Absorption through the eye may cause effects similar to skin and/or ingestion.

Delayed / Immediate Effects:

Immediate effects can be expected after short-term exposure.

Additional Information

RTECS No: YX5600000

Exposure may cause irritation of eyes, mucous membranes, upper respiratory tract and skin.

To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated





12. ECOLOGICAL INFORMATION

12.1 Toxicity
Unavailable
12.2 Persistence and degradability
Unavailable
12.3 Bioaccumlative potential
Unavailable
12.4 Mobility in soil
Unavailable
12.5 Results of PBT and vPvB assessment
Unavailable
12.6 Other adverse effects
May be harmful to the aquatic environment.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with National legislation.

Contaminated packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with National legislation.

14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG

Code, ADR, RID and IATA.

UN-Number: UN1544 (alkaloides.)

UN proper shipping name: Alkaloids, solid, n.o.s. (Veratridine)

Transport hazard class(es): "6.1"

Packaging group //

Environmental hazards

This product is not classified as environmentally hazardous according to the UN Model Regulations, not a marine pollutant according to the IMDG Code.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

- 15.1 Safety, health and environmental regulations/legislation specific for the substance: Unavailable.
- 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been made for this product.





Section 16 -Other Information

For R&D use only. Not for drug, household or other uses. For use only by trained technical and/or scientific personnel.

DISCLAIMER

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. The burden of safe use of this material rests entirely with the user. Fermentek shall not be held liable or any damage resulting from handling or from contact with the above product.

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