SAFETY DATA SHEET



Order Number Customer Number

1. Identification of the substance/preparation and of the company/undertaking

Product name : Cyclopamine, V. californicum

Catalog # : 239803

Chemical formula : C₂₇H₄₁NO₂

Supplier : Manufactured by EMD Biosciences, Inc.

10394 Pacific Center Court San Diego, CA 92121 (858)450-5558/(800)854-3417

FAX: (858)453-3552

Synonym : Not available

Emergency telephone :

elephone : Call Chemtrec®

number

(800)424-9300 (within U.S.A.) (703)527-3887 (outside U.S.A.)

2. Composition / information on ingredients

Substance/Preparation : Substance

Chemical name*	CAS No.	EC Number	Symbol	R-Phrases
Cyclopamine, V. californicum	4449-51-8	Not available.	Xn	R68, R63

3. Hazards identification

Physical/chemical hazards

: Not applicable.

Human health hazards

CAUTION!

MAY CAUSE BIRTH DEFECTS BASED ON ANIMAL DATA.

POSSIBLE CANCER HAZARD

CONTAINS MATERIAL WHICH MAY CAUSE CANCER BASED ON ANIMAL DATA.

CONTAINS MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS BASED ON

ANIMAL DATA.

4. First-aid measures

First-Aid measures

Inhalation

: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact

: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Eye Contact

: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Aggravating conditions

 Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

5. Fire-fighting measures

Flammability of the Product

: May be combustible at high temperature.

Extinguishing Media

Suitable

: SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Hazardous thermal (de)composition products

These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Special fire-fighting procedures

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Protection of fire-fighters

: Be sure to use an approved/certified respirator or equivalent.

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Accidental release measures 6.

Personal precautions Small Spill and Leak Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill and Leak

Use a shovel to put the material into a convenient waste disposal container.

7. Handling and storage

Handling

Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 4°C (39.2°F).

Packaging materials

Recommended use : Use original container.

Exposure controls/personal protection 8.

Engineering measures

: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Hygiene measures

Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Ingredient Name

Cyclopamine, V. californicum

Occupational Exposure Limits

Not available.

Personal protective equipment

Skin and body : Lab coat. Eves Safety glasses.

Protective Clothing (Pictograms)



Physical and chemical properties 9.

Physical state

Color

: Solid. White

Molecular Weight

411.6 g/mole

Solubility

Not available

Flash point

Explosive properties

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Stability and reactivity

Stability

The product is stable.

Conditions to avoid

: Not available.

Hazardous Decomposition Products

These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Toxicological information

RTECS # **Local effects** : GY0750000

Skin irritation

Not available.

Acute toxicity

LD50: Not available. LC50: Not available.

Chronic toxicity

Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Other Toxic Effects on Humans

Not available

No specific information is available in our database regarding the other toxic effects of this material for humans.

Not available.

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Not available.

Specific effects

Carcinogenic effects Not available. **Mutagenic effects** Not available. Reproduction toxicity Not available.

Classified POSSIBLE for human. Teratogenic effects

12. Ecological information

Ecotoxicity

: Not available.

Toxicity of the Products of Biodegradation

: The product itself and its products of degradation are not toxic.

Disposal considerations

Contaminated packaging

Methods of disposal; Waste of residues; : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Transport information

International transport regulations

Land - Road/Railway

ADR/RID Class : Not controlled under ADR (Europe).

<u>Sea</u>

IMDG Class : Not controlled under IMDG.

IATA-DGR Class : Not controlled under IATA.

Special Provisions for Not applicable.

Transport

15. Regulatory information

EU Regulations

Hazard symbol(s)



Classification : Harmful

Risk Phrases R68- Possible risks of irreversible effects.

R63- Possible risk of harm to the unborn child.

S22- Do not breathe dust. **Safety Phrases**

S36/37- Wear suitable protective clothing and gloves.

Contains : - Cyclopamine, V. californicum U.S. Federal Regulations

TSCA: No products were found.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

HCS Classification Not controlled under the HCS (United States).

State Regulations

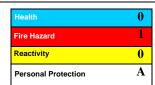
WHMIS (Canada) : Not controlled under WHMIS (Canada).

No products were found.

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16. Other information

Hazardous Material Information System (U.S.A.)



National Fire Protection Association (U.S.A.)



Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. **This product is intended for research use only.**

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