

1. PRODUCT AND COMPANY IDENTIFICATION

| 1.1 | Product identifiers | | | |
|-----|---|---|--|--|
| | Product name | : | Cyclopamine | |
| | Product Number Brand | : | 10-1082 Focus Biomolecules | |
| | CAS-No. | : | 4449- 51-8 | |
| 1.2 | Relevant identified uses of the substance or mixture and uses advised against | | | |
| | Identified uses | : | For Laboratory Research Use Only | |
| 1.3 | Details of the supplier of the safety data sheet | | | |
| | Company | : | Focus Biomolecules 400 Davis Drive, Suite 600 Plymouth Meeting PA, 19462 | |
| | Telephone | : | +1 855-362-8721 | |

1.4 Emergency telephone number

E-mail

Emergency Phone # : +1-215-565-5428

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

:

Acute toxicity, Oral (Category 3), H301 Reproductive toxicity (Category 1B), H360

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



| Signal word Hazard | Danger |
|----------------------------|---|
| statement(s) | |
| H301 | Toxic if swallowed. |
| H360 | May damage fertility or the unborn child. |
| Precautionary statement(s) | |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. Wash skin thoroughly after handling. |
| P264 | Do not eat, drink or smoke when using this product. |
| P270 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P280 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. |
| P301 + P310 + P330 | IF exposed or concerned: Get medical advice/ attention. |

support@focusbiomolecules.com

P308 + P313

| P405 | Store locked up. |
|------|---|
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| Synonyms | : 11-Deoxyjervine |
|------------------|---|
| Formula | : C ₂₇ H ₄₁ NO ₂ |
| Molecular weight | : 411.62 g/mol |
| CAS-No. | : 4449-51-8 |

Hazardous components

| Component | Classification | Concentration |
|-------------|-------------------------------|---------------|
| Cyclopamine | | |
| | Acute Tox. 3; Repr. 1B; H301, | 90 - 100 % |
| | H360 | |

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

Flush eyes with water as a precaution.

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. FIREFIGHTING 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 No data available

5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting 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.

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.

Reference to other sections

6.4 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.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

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 Keep

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

Recommended storage temperature -20°C

Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

7.3 Specific end use(s)

Apart 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

Contains no substances with occupational exposure limit values. Hazardous components without 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 N100 (US) or type P3 (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).

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a)

| | 1 2 | |
|-----|--|--|
| App | pearance For | m: solid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pН | No data available |
| e) | Melting point/freezing point | Melting point/range: 230 - 235 °C (446 - 455 °F) |
| 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 No |
| 1) | Vapour density | data available No |
| m) | Relative density | data available |
| n) | Water solubility | practically insoluble |
| o) | Partition coefficient: n- octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available No |
| s) | Explosive properties | data available No |
| t) | Oxidizing properties | data available |
| | safety information ta available | |

10. STABILITY AND REACTIVITY

10.1 Reactivity

9.2

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 Heat, flames and sparks.
- **10.5** Incompatible materials Strong oxidizing agents, Acids and bases

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION 11.1

Information on toxicological effects

Acute toxicity No data available

Inhalation: No data available

Dermal: No data available

No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitisation No data available

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.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

May damage the unborn child.

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

| Repeated dose toxicity | Rat - Oral - 6 - 9 d -Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Eye, ear. Specific Developmental Abnormalities: Craniofacial (including nose and tongue). |
|------------------------|---|
| | Mouse - 10 d -Specific Developmental Abnormalities: Musculoskeletal system. |
| | Rabbit - 7 d -Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Craniofacial (including nose and tongue). |
| | Rabbit - Oral - 7 d -Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Craniofacial (including nose and tongue). |
| | Domestic Animals - Oral - 14 d -Effects on Embryo or Fetus: Fetal death. |
| | Hamster - Oral - 7 d -Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). |
| | Domestic Animals - Oral - 30 - 31 d -Specific Developmental Abnormalities: Musculoskeletal system. |

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

12. ECOLOGICAL

INFORMATION 12.1 Toxicity

No data available

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

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1544 Class: 6.1 Packing group: III Proper shipping name: Alkaloids, solid, n.o.s. (Cyclopamine) Reportable Quantity (RQ): Poison Inhalation Hazard: No

IMDG

UN number: 1544 Class: 6.1 Packing group: III Proper shipping name: ALKALOIDS, SOLID, N.O.S. (Cyclopamine) EMS-No: F-A, S-A

IATA

UN number: 1544 Class: 6.1 Packing group: III Proper shipping name: Alkaloids, solid, n.o.s. (Cyclopamine)

15. REGULATORY INFORMATION

SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

CAS-No.

Revision Date

Cyclopamine

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

| Acute Tox. | Acute toxicity |
|------------|---|
| H301 | Toxic if swallowed. |
| H360 | May damage fertility or the unborn child. |
| Repr. | Reproductive toxicity |

Further information

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