1 Product and Company Identification

1.1 Product Name: Cyclopamine1.2 Catalog Number: 72072, 72074

1.3 Synonyms: 11-Deoxojervine, Jervine;

(2'R,3S,3'R,3'aS,6'S,6aS,6bS,7'aR,11aS,11bR)-

1,2,3,3'a,4,4',5',6,6',6a,6b,7,7',7'a,8,11,11a,11b-octadecahydro-3',6',10,11b-tetramethyl-spiro[9H-benzo[a]fluorene-9,2'(3'H)-

furo[3,2-b]pyridine]-3-ol

1.4 Product Use: Hedgehog pathway inhibitor, inhibits Smoothened

1.5 Manufacturer/Supplier: STEMCELL Technologies SARL

40 rue des Berges, Miniparc Polytec, Bât. Sirocco,

38000 Grenoble, France

1.6 In Case of Emergency Call: +33.(0).4.76.04.75.30

2 Hazards Identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 Label elements

Pictogram

No data available

Signal word No data available

Hazard statement(s)

Based on evaluation of currently available data this substance or mixture is not classifiable according to GHS.

Precautionary statement(s)

No data available

2.3 Other hazards No data available

3 Composition / Information on Ingredients

Hazardous Components (Chemical Name)	CAS#	Concentration	EC#
Cyclopamine	4449-51-8	100%	N/A

4 First Aid Measures

4.1 Description of first aid measures

4.1.1 If inhaled

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

4.1.2 In case of skin contact

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Immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

4.1.3 In case of eye contact

Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes examined and tested by medical personnel.

4.1.4 If swallowed

Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

The toxicological properties of this product have not been fully evaluated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 Fire Fighting Measures

5.1 Extinguishing Media

5.1.1 Suitable Extinguishing Media

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

Use water spray to cool fire-exposed containers.

5.1.2 Unsuitable Extinguishing Media

A solid water stream may be inefficient.

5.2 Special hazards arising from the substance or mixture

5.2.1 Flammable Properties and Hazards

No data available

5.2.2 Flash Pt

No data available

5.2.3 Autoignition Pt

No data available

5.2.4 Explosive Limits

LEL: No data available UEL: No data available

5.2.5 Hazardous Combustion Products

No data available

5.3 Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid raising and breathing dust, and provide adequate ventilation.

As conditions warrant, wear a NIOSH approved (or equivalent) self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

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6.2 Environmental precautions

Take steps to avoid release into the environment, if safe to do so.

6.3 Methods and materials for containment and cleaning up

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

7 Handling and Storage

7.1 Precautions for safe handling

Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage

Keep container tightly closed.

Store in accordance with information listed on the product insert.

8 Exposure Controls/Personal Protection

8.1 Exposure limits

Component	CAS#	Value	Control parameters
Cyclopamine	4449-51-8	No data available	No data available

8.2 Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.3 Personal protective equipment

8.3.1 Eye/face protection

Safety glasses

8.3.2 Skin protection

Compatible chemical-resistant gloves

Lab coat

8.3.3 Respiratory protection

NIOSH (US) or CEN (EU) approved respirator, as conditions warrant.

8.3.4 General hygiene considerations

Do not take internally.

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Wash thoroughly after handling.

8.3.5 Environmental exposure controls

No data available

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance A crystalline solid

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Odour No data available
Odour threshold No data available
Melting point/freezing point No data available
Boiling point/boiling range No data available
Decomposition temperature No data available
Relative density No data available
Solubility in water No data available

Solubility in other liquids ~0.25 mg/mL in 1:3 EtOH:PBS (pH 7.2); ~10

mg/mL in EtOH; ~2 mg/mL in DMF

pΗ No data available Partition coefficient: n-octanol/water No data available Viscosity No data available Vapour pressure No data available Vapour density No data available Evaporation rate No data available Flash point No data available Flammability (solid, gas) No data available Upper/lower flammability or explosive limits No data available Auto-ignition temperature No data available

9.2 Other information

Molecular formula $C_{27}H_{41}NO_2$ Molecular weight 411.60

10 Stability and Reactivity

10.1 Reactivity No data available

10.2 Chemical stability Stable

10.3 Possibility of hazardous reactions No data available10.4 Conditions to avoid No data available

10.5 Incompatible materials Strong oxidizing agents

10.6 Hazardous decomposition products Carbon dioxide

Carbon monoxide Nitrogen oxides

11 Toxicological Information

11.1 Acute toxicity

No data available

11.2 Skin corrosion/irritation

No data available

11.3 Serious eye damage/eye irritation

No data available

11.4 Aspiration hazard

No data available

11.5 Specific target organ toxicity - single exposure

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No data available

11.6 Specific target organ toxicity - repeated exposure

No data available

11.7 Respiratory and/or skin sensitization

No data available

11.8 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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

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

identified as a carcinogen or potential carcinogen by OSHA.

11.9 Reproductive toxicity

No data available

11.10 Germ cell mutagenicity

No data available

11.11 Signs and symptoms of exposure

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

11.12 RTECS # GY0750000

12 Ecological Information

12.1 Toxicity Avoid release into the environment.

Runoff from fire control or dilution water may cause

pollution.

12.2 Persistence and degradability No data available
12.3 Bioaccumulative potential No data available

12.4 Mobility in soilNo data available

12.5 Other adverse effects No data available

13 Disposal Considerations

13.1 Waste disposal methodDispose in accordance with local, provincial/state, and

federal regulations.

14 Transport Information

14.1 UN number No data available

14.2 UN proper shipping name DOT Not dangerous goods

ADR/RID Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods

14.3 Transport hazard class(es) No data available

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14.4 Packing group No data available
14.5 Environmental hazards No data available
14.6 Special precautions No data available

15 Regulatory Information

15.1 US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS#	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
Cyclopamine	4449-51-8	No	No	No	No

15.2 Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP, ODC	CWA NPDES	TSCA	CA PROP.65
Cyclopamine	4449-51-8	No	No	No	No

15.3 Regulatory information statement

This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and European Directive 67/548/EEC as amended.

16 Other Information

16.1 Prepared by: Quality Control, STEMCELL Technologies Inc.

16.2 Revision: N/A

16.3 Notice: The above information is believed to be correct but does not purport to be all

inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Date Prepared shown in Section 1.7 of this document and

may be subject to amendment by STEMCELL Technologies Inc.

16.4 Disclaimer: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR

HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

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