# SAFETY DATA SHEET

Version 5.0 Revision Date 12/13/2017 Print Date 11/02/2018

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Lasiocarpine

Product Number : PHL80412 Brand : Sigma-Aldrich

CAS-No. : 303-34-4

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

**USA** 

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 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 Carcinogenicity (Category 2), H351

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 Danger

Hazard statement(s)

H301 Toxic if swallowed.

H351 Suspected of causing cancer.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

understood.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

protection.

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse

mouth.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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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 : (1S,7aR)-7-[({(2S)-2,3-dihydroxy-2-[(1S)-1-methoxyethyl]-3-

methylbutanoyl}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2-

Europine 7-angelate

Formula : C21H33NO7 Molecular weight : 411.50 g/mol CAS-No. : 303-34-4

Hazardous components

Component	Classification	Concentration
(1S,7aR)-7-[({(2S)-2,3-Dihydroxy-2-[(1S)-1-methoxyethyl]-3-methylbutanoyl}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2-		
	Acute Tox. 3; Carc. 2; H301, H351	90 - 100 %

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. Move out of dangerous area.

### 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

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## 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.

### 6.4 Reference to other sections

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 2 - 8 °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

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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).

## Control of environmental exposure

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

Appearance Form: solid b) Odour No data available Odour Threshold No data available d) рН No data available Melting point/freezing No data available e) point

Initial boiling point and boiling range

No data available

g) Flash point No data available h) Evaporation rate No data available Flammability (solid, gas) No data available i) No data available Upper/lower flammability or

explosive limits k) Vapour pressure No data available Vapour density No data available m) Relative density No data available No data available Water solubility

Partition coefficient: noctanol/water

No data available

Auto-ignition temperature

No data available

q) Decomposition temperature

No data available

Viscosity No data available r) Explosive properties No data available s) Oxidizing properties No data available

#### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

#### Reactivity 10.1

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

No data available

#### 10.5 Incompatible materials

Strong oxidizing agents

# 10.6 Hazardous decomposition products

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

Other decomposition products - No data available

In the event of fire: see section 5

## 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

No data available

IARC: 2B - Group 2B: Possibly carcinogenic to humans ((1S,7aR)-7-[({(2S)-2,3-Dihydroxy-2-[(1S)-1-

methoxyethyl]-3-methylbutanoyl}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2-)

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.

## Reproductive toxicity

No data available

# 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**

RTECS: Not available

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

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## 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. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

DOT (US)

UN number: 2811 Class: 6.1 Packing group: III

Proper shipping name: Toxic solids, organic, n.o.s. ((1S,7aR)-7-[({(2S)-2,3-Dihydroxy-2-[(1S)-1-methoxyethyl]-3-

methylbutanoyl}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2-)

Reportable Quantity (RQ): 10 lbs Poison Inhalation Hazard: No

**IMDG** 

UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. ((1S,7aR)-7-[({(2S)-2,3-Dihydroxy-2-[(1S)-1-methoxyethyl]-3-

methylbutanoyl]oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2-)

**IATA** 

UN number: 2811 Class: 6.1 Packing group: III

Proper shipping name: Toxic solid, organic, n.o.s. ((1S,7aR)-7-[((2S)-2,3-Dihydroxy-2-[(1S)-1-methoxyethyl]-3-

methylbutanoyl}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2-)

### 15. REGULATORY INFORMATION

# **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## **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

Acute Health Hazard, Chronic Health Hazard

## **Massachusetts Right To Know Components**

1-yl (2Z)-2-

## Pennsylvania Right To Know Components

 $CAS-No. \qquad Revision Date \\ (1S,7aR)-7-[(\{(2S)-2,3-Dihydroxy-2-[(1S)-1-methoxyethyl]-3-\\ methylbutanoyl\}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin- \\ \\ CAS-No. \qquad Revision Date \\ 303-34-4 \qquad 1993-02-16 \\ \\ \\ 1993-02-16$ 

1-yl (2Z)-2-

CAS-No. Revision Date

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(1S,7aR)-7-[({(2S)-2,3-Dihydroxy-2-[(1S)-1-methoxyethyl]-3methylbutanoyl}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2303-34-4

1993-02-16

**New Jersey Right To Know Components** 

(1S,7aR)-7-[({(2S)-2,3-Dihydroxy-2-[(1S)-1-methoxyethyl]-3methylbutanoyl}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2-

CAS-No. 303-34-4

CAS-No.

303-34-4

**Revision Date** 1993-02-16

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

(1S,7aR)-7-[({(2S)-2,3-Dihydroxy-2-[(1S)-1-methoxyethyl]-3-

**Revision Date** 2007-09-28

methylbutanoyl}oxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl (2Z)-2-

## **16. OTHER INFORMATION**

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

Acute Tox. Acute toxicity Carc. Carcinogenicity H301 Toxic if swallowed.

Suspected of causing cancer. H351

**HMIS Rating** 

2 Health hazard: Chronic Health Hazard: 0 Flammability: Physical Hazard n

**NFPA** Rating

2 Health hazard: Fire Hazard: 0 Reactivity Hazard: 0

## **Further information**

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## **Preparation Information**

Sigma-Aldrich Corporation Product Safety - Americas Region 1-800-521-8956

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