

## SAFETY DATA SHEET

Version 6.1  
Revision Date 05/28/2017  
Print Date 09/23/2019

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1. PRODUCT AND COMPANY IDENTIFICATION

## 1.1 Product identifiers

Product name : Ophiobolin A

Product Number : SML1478

Brand : Sigma

CAS-No. : 4611-05-6

## 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 Inc.  
3050 Spruce Street  
ST. LOUIS MO 63103  
UNITED STATES

Telephone : +1 314 771-5765

Fax : +1 800 325-5052

## 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887

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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

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.

Precautionary statement(s)  
P264  
P270  
P301 + P310 + P330

Wash skin thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.  
Store locked up.  
Dispose of contents/ container to an approved waste disposal plant.

P405  
P501

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms : (2'S,3'S,3aR,5'R,6aS,9R,9aS,10aR)-1,3a,4,4',5',6a,7,8,9,9a,10,10a-dodecahydro-9-hydroxy-3',9,10a-trimethyl-5'-spiro[dicyclopenta[a,d]cyclooctene-3(2H),2'(3'H)-furan]-6-carboxaldehyde

Formula : C<sub>25</sub>H<sub>36</sub>O<sub>4</sub>  
Molecular weight : 400.55 g/mol  
CAS-No. : 4611-05-6

#### Hazardous components

| Component                                     | Classification     | Concentration |
|-----------------------------------------------|--------------------|---------------|
| <b>Ophiobolin a from helminthosporium sp.</b> |                    |               |
|                                               | Acute Tox. 3; H301 | <= 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

Move out of dangerous area. 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

Carbon oxides

#### 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.

## **6.4 Reference to other sections**

For disposal see section 13.

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# **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 combustion. Formation should be taken into consideration before additional processing.

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

Air and light sensitive. Keep in a dry place.

## **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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# **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 (EN 143) respirator cartridges as a backup to engineering controls. If the 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.

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# **9. PHYSICAL AND CHEMICAL PROPERTIES**

## **9.1 Information on basic physical and chemical properties**

- |               |                   |
|---------------|-------------------|
| a) Appearance | Form: powder      |
| b) Odour      | No data available |

|                                                 |                      |
|-------------------------------------------------|----------------------|
| c) Odour Threshold                              | No data available    |
| d) pH                                           | No data available    |
| e) Melting point/freezing point                 | No data available    |
| 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    |
| l) Vapour density                               | No data available    |
| m) Relative density                             | No data available    |
| n) Water solubility                             | No data available    |
| 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    |
| s) Explosive properties                         | No data available    |
| t) Oxidizing properties                         | No data available    |

## 9.2 Other safety information

No data available

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

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

No data available

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Mouse - 238 mg/kg(Ophiobolin a from helminthosporium sp.)

Inhalation: No data available(Ophiobolin a from helminthosporium sp.)

Dermal: No data available(Ophiobolin a from helminthosporium sp.)

No data available(Ophiobolin a from helminthosporium sp.)

#### Skin corrosion/irritation

No data available(Ophiobolin a from helminthosporium sp.)

#### Serious eye damage/eye irritation

No data available(Ophiobolin a from helminthosporium sp.)

#### Respiratory or skin sensitisation

No data available(Ophiobolin a from helminthosporium sp.)

#### Germ cell mutagenicity

No data available(Ophiobolin a from helminthosporium sp.)

#### 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 identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

No data available(Ophiobolin a from helminthosporium sp.)

No data available(Ophiobolin a from helminthosporium sp.)

#### Specific target organ toxicity - single exposure

No data available(Ophiobolin a from helminthosporium sp.)

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available(Ophiobolin a from helminthosporium sp.)

#### Additional Information

RTECS: RL1576000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Ophiobolin a from helminthosporium sp.)

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## 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(Ophiobolin a from helminthosporium sp.)

#### 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

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### 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 chem scrubber.

##### Contaminated packaging

Dispose of as unused product.

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### 14. TRANSPORT INFORMATION

#### DOT (US)

UN number: 2811      Class: 6.1      Packing group: III  
Proper shipping name: Toxic solids, organic, n.o.s. (Ophiobolin a from helminthosporium sp.)  
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. (Ophiobolin a from helminthosporium sp.)

#### IATA

UN number: 2811      Class: 6.1      Packing group: III  
Proper shipping name: Toxic solid, organic, n.o.s. (Ophiobolin a from helminthosporium sp.)

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### 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

#### 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 |
|----------------------------------------|-----------|---------------|
| Ophiobolin a from helminthosporium sp. | 4611-05-6 |               |

#### New Jersey Right To Know Components

|                                        | CAS-No.   | Revision Date |
|----------------------------------------|-----------|---------------|
| Ophiobolin a from helminthosporium sp. | 4611-05-6 |               |

#### 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.

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## 16. OTHER INFORMATION

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

H301                      Toxic if swallowed.

#### HMIS Rating

Health hazard:                      2

Chronic Health Hazard:

Flammability:                      0

Physical Hazard                      0

#### NFPA Rating

Health hazard:                      2

Fire Hazard:                      0

Reactivity Hazard:                      0

#### Further information

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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. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

#### Preparation Information

Sigma-Aldrich Corporation

Product Safety – Americas Region

1-800-521-8956

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