

## Material Safety Data Sheet

Version 1.0

Revision Date 11/20/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Aristolochic acid C

Product Number : CN000879

Brand : PUSH

Company : Chengdu Push Bio-technology Co., Ltd.  
No.8 West Wuke second road, Wuhou District, Chengdu City, Sichuan  
Province, China

Telephone : 86-28-85370565-215

Fax : 86-28-85370565-777

Emergency Phone # : 86-28-85370565-215

### 2. HAZARDS IDENTIFICATION

#### OSHA Hazards

Toxic by ingestion. Carcinogen.

#### GHS Label elements, including precautionary statements

Pictogram



Signal word **Danger**

Hazard statement(s)

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H330 Fatal if inhaled.

H341 Suspected of causing genetic defects.

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.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash skin thoroughly after handling.

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

P271 Use only outdoors or in a well-ventilated area.

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

P281 Use personal protective equipment as required.

P284 [In case of inadequate ventilation] Wear respiratory protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician if you feel unwell.

P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

P310 Immediately call a POISON CENTER or doctor/physician.

P320 Specific treatment is urgent (see supplemental first aid instructions on this label).

P321 Specific treatment (see supplemental first aid instructions on this label).

P322 Specific measures (see supplemental first aid instructions on this label).

P330 Rinse mouth.

P361 Take off immediately all contaminated clothing.

P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

#### HMIS Classification

Health hazard: 2

Flammability: 0

Physical hazards: 0

#### NFPA Rating

Health hazard: 2

Fire: 0

Reactivity Hazard: 0

#### Potential Health Effects

**Inhalation** Fatal if inhaled. May cause respiratory tract irritation.

**Skin** Fatal in contact with skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Ingestion** Fatal if swallowed.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Name:** Aristolochic acid C

**CAS#:** 4849-90-5

**Formula:**  $C_{16}H_9NO_7$

**Molecular Weight:** 327.248

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### 4. FIRST AID MEASURES

#### General advice

Consult a doctor.

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 doctor.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a doctor.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a doctor.

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**5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media**

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

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions**

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

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

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**7. HANDLING AND STORAGE**

### **Precautions for safe handling**

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### **Conditions for safe storage**

Keep container tightly closed.

Recommended storage temperature: 2 - 8°C

Keep in a dry place.

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## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

### **Personal protective equipment**

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99(US) or type P2 (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).

#### **Hand protection**

Handle with gloves.

#### **Eye protection**

Face shield and safety glasses.

#### **Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

### **Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance:

Orange red solid

### Safe data

pH	no data available
Melting point	283-284 °C
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	no data available
Solubility	Methanol, Ethyl Acetate, DMF, Water containing soda

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

Strong oxidizing agents.

### Hazardous decomposition products

Carbon monoxide, Carbon dioxide, Nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity data

no data available

### Other multiple dose toxicity data

no data available

### Tumorigenic data

no data available

**Mutation data**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure (GHS)**

no data available

**Specific target organ toxicity - repeated exposure (GHS)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

<b>Inhalation</b>	Fatal if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	Fatal if swallowed.
<b>Skin</b>	Fatal in contact with skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.

**Signs and Symptoms of Exposure**

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

**12. ECOLOGICAL INFORMATION****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

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Tel: 86-28-85370565-215

Fax: 86-28-85370565-777

Website: <http://www.push-herbchem.com>

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**13. DISPOSAL CONSIDERATIONS**

**Product**

Observe all federal, state, and local environmental regulations. 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.

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**14. TRANSPORT INFORMATION**

**DOT (US)**

UN-Number: 1544      Class: 6.1 Toxic substances      Packing group: III

Proper shipping name: Alkaloids, solid, n.o.s.

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN-Number: 1544      Class: 6.1 Toxic substances      Packing group: III

EMS-No: F-A, S-A

Proper shipping name: Alkaloids, solid, n.o.s.

Marine pollutant: No

**IATA**

UN-Number: 1544      Class: 6.1 Toxic substances      Packing group: III

Proper shipping name: Alkaloids, solid, n.o.s.



## **15. REGULATORY INFORMATION**

### **OSHA Hazards**

Toxic by ingestion. Carcinogen.

### **DSL Status**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

Phenanthro[3,4-d]-1,3-dioxole-5-carboxylic acid, 10-hydroxy-6-nitro-

CAS-No. 4849-90-5

### **SARA 302 Components**

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

### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the thresh

(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**

Phenanthro[3,4-d]-1,3-dioxole-5-carboxylic acid, 10-hydroxy-6-nitro-

CAS-No. 4849-90-5

### **New Jersey Right To Know Components**

Phenanthro[3,4-d]-1,3-dioxole-5-carboxylic acid, 10-hydroxy-6-nitro-

CAS-No. 4849-90-5

### **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**

This MSDS above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.