



# Material Safety Data Sheet

Version 1.0

Revision Date 11/20/2017

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Zerumbone

Product Number : CN001248

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

Skin sensitizer.

### GHS Label elements, including precautionary statements

#### Pictogram



Signal word **Warning**

#### Hazard statement(s)

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

#### Precautionary statement(s)

No.8 Wuke West Second Road, Wuhou district, Chengdu, Sichuan, China, 610045

Tel: 86-28-85370565-215 Fax: 86-28-85370565-777

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



- P261                    Avoid breathing dust/fume/gas/mist/vapors/spray.
- P272                    Contaminated work clothing should not be allowed out of the workplace.
- P273                    Avoid release to the environment.
- P280                    Wear protective gloves/eye protection/face protection.
- P302+P352            IF ON SKIN: Wash with plenty of soap and water.
- P321                    Specific treatment (see supplemental first aid instructions on this label).
- P333+P313            IF SKIN irritation or rash occurs: Get medical advice/attention.
- P363                    Wash contaminated clothing before reuse.
- P391                    Collect spillage.
- 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**        May be harmful if inhaled. May cause respiratory tract irritation.

**Skin**                May be harmful if absorbed through skin. May causes skin irritation.

**Eyes**                May causes eye irritation.

**Ingestion**           May be harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Name:** Zerumbone

**CAS#:** 471-05-6

**Formula:** C<sub>15</sub>H<sub>22</sub>O

**Molecular Weight:** 218.33



## 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.

## 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.

## 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.

## 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.

## 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 solemeans 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

Tightly sealed goggles.

#### 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:**

White solid

#### **Safe data**

pH	no data available
Melting point	67-69 °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	no data available

---

### **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**

Other decomposition products - no data available.

Hazardous decomposition products formed under fire conditions. - Carbon 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

May cause allergic skin reaction.

#### 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>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. May causes skin irritation.
<b>Eyes</b>	May causes serious 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

No.8 Wuke West Second Road, Wuhou district , Chengdu,Sichuan ,China,610045

Tel: 86-28-85370565-215 Fax: 86-28-85370565-777

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



### **Persistence and degradability**

no data available

### **Bioaccumulative potential**

no data available

### **Mobility in soil**

no data available

### **PBT and vPvB assessment**

no data available

### **Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

## **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.

## **14. TRANSPORT INFORMATION**

### **DOT (US)**

Not dangerous goods

### **IMDG**

UN number: 3077      Class: 9      Packing group: III      EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Zerumbone)



Marine pollutant: Marine pollutant

#### IATA

UN number: 3077      Class: 9      Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Zerumbone)

## 15. REGULATORY INFORMATION

### OSHA Hazards

Skin sensitiser.

### DSL Status

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

2,6,10-Cycloundecatrien-1-one, 2,6,9,9-tetramethyl-, (2E,6E,10E)-

CAS-No. 471-05-6

### 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 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

2,6,10-Cycloundecatrien-1-one, 2,6,9,9-tetramethyl-, (2E,6E,10E)-

CAS-No. 471-05-6

### New Jersey Right To Know Components

2,6,10-Cycloundecatrien-1-one, 2,6,9,9-tetramethyl-, (2E,6E,10E)-



CAS-No. 471-05-6

#### **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.

#### **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.