



# Material Safety Data Sheet

Version 1.0

Revision Date 11/20/2017

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Kaempferol

Product Number : CN000502

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

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Emergency Phone # : 86-28-85370565-215

## 2. HAZARDS IDENTIFICATION

### OSHA Hazards

Target Organ Effect, Toxic by ingestion, Irritant, Carcinogen.

### Target Organs

Liver, Kidney, Nerves., Heart.

### GHS Label elements, including precautionary statements

Pictogram



Signal word **Danger**

Hazard statement(s)

H301 Toxic if swallowed.

H315 Causes skin irritation.



H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
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.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: wash with plenty of water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue
P308+P313	rinsing.
P312	IF exposed or concerned: Get medical advice/attention.
P321	Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment(see supplemental first aid instructions on this
P330	label).
P332+P313	Rinse mouth.
P337+P313	If skin irritation occurs: Get medical advice/attention.
P362	If eye irritation persists: Get medical advice/attention.

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

#### HMIS Classification

Health hazard: 2

Flammability: 0

Physical hazards: 1

#### NFPA Rating

Health hazard: 2

Fire: 0

Reactivity Hazard: 0

#### Potential Health Effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

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

**Eyes** Causes serious eye irritation.

**Ingestion** Toxic if swallowed.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Name:** Kaempferol

**CAS#:** 520-18-3

**Formula:**  $C_{15}H_{10}O_6$

**Molecular Weight:** 286.239

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### 4. 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.

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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**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust.

**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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance:

Off-white solid

### Safe data

pH	no data available
Melting point	277 °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

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## 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

Hazardous decomposition products formed under fire conditions. - Carbon oxides.

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity data

no data available

### Other multiple dose toxicity data

no data available

### Tumorigenic data

no data available

### Mutation data

Type of test	System	Dose
Mutation in microorganisms	Bacteria - Salmonella typhimurium	166 nmol/plate
DNA adduct	Bacteria - Escherichia coli	100 umol/L
Micronucleus test	Human Lymphocyte	10 mg/L
DNA inhibition	Human Fibroblast	50 mg/L
Mutation test systems	Human Fibroblast	100 mg/L
Sister chromatid exchange	Human Lymphocyte	20 mg/L
Sex chromosome loss and nondisjunction	Human Lymphocyte	20 mg/L
Micronucleus test	Rodent - mouse	200 mg/kg
Cytogenetic analysis	Rodent - hamster Ovary	25 mg/L
Sister chromatid exchange	Rodent - hamster Ovary	45 mg/L
Mutation in mammalian somatic cells	Rodent - hamster Ovary	25 mg/L

### 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>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	Toxic if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Causes eye irritation.

### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not

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been thoroughly investigated.

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## 12. ECOLOGICAL INFORMATION

### Toxicity

no data available

### 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

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: 2811      Class: 6.1      Packing group: III

Proper shipping name: Toxic solids, organic, n.o.s. (3,4',5,7-Tetrahydroxyflavone)

Reportable Quantity (RQ): 250000 lbs

Marine pollutant: No

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. (3,4',5,7-Tetrahydroxyflavone)

Marine pollutant: No

#### IATA

UN-Number: 2811      Class: 6.1      Packing group: III

Proper shipping name: Toxic solid, organic, n.o.s. (3,4',5,7-Tetrahydroxyflavone)

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## 15. REGULATORY INFORMATION

#### OSHA Hazards

Target Organ Effect, Toxic by ingestion, Irritant, Carcinogen.

#### DSL Status

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

4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-(4-hydroxyphenyl)-

CAS-No. 520-18-3

#### 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**

4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-(4-hydroxyphenyl)-

CAS-No. 520-18-3

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

4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-(4-hydroxyphenyl)-

CAS-No. 520-18-3

### **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.