



The Power to Question

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 06-Jan-2015

Version 1.2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Kaempferol
Product Code SC-202679

Recommended use of the chemical and restrictions on use

For research use only. Not intended for diagnostic or therapeutic use.

Details of the supplier of the safety data sheet

Santa Cruz Biotechnology, Inc.
10410 Finnell Street
Dallas, TX 75220
831.457.3800
800.457.3801
scbt@scbt.com

Emergency telephone number

Chemtrec
800.424.9300 (Within USA)
1.703.527.3887 (Outside USA)

2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification

Acute toxicity - Oral Category 3
Germ Cell Mutagenicity Category 2

Label elements

Signal word Danger
Hazard statements Toxic if swallowed
Suspected of causing genetic defects

Symbols/Pictograms



Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

Do not eat, drink or smoke when using this product
IF exposed or concerned: Get medical advice/attention
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage
Precautionary Statements - Disposal

Rinse mouth
Store locked up
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC) Not applicable

Other Information



NFPA

| | |
|----------------------------------|---|
| Health hazards | 0 |
| Flammability | 1 |
| Stability | 0 |
| Physical and chemical properties | - |



HMIS

| | |
|---------------------|---|
| Health hazards | 0 |
| Flammability | 1 |
| Physical hazards | 0 |
| Personal protection | - |

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 520-18-3
 Molecular Weight 286.24
 Formula C₁₅H₁₀O₆

| Chemical Name | CAS No | Weight % | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|----------|----------|-----------|-------------|-----------------|
| Kaempferol | 520-18-3 | >98 | - | - | - |

4. FIRST AID MEASURES

First Aid Measures

General advice Immediate medical attention is required. If symptoms persist, call a physician.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately. If symptoms persist, call a physician.

Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician.

Inhalation Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Call a physician. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. Call a physician.

Self-protection of the first aider Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.



Specific hazards arising from the chemical

| | |
|--|---------------------------|
| Specific hazards arising from the chemical | No information available. |
| Hazardous combustion products | Carbon oxides. |

Explosion data

| | |
|----------------------------------|---------------------------|
| Sensitivity to Mechanical Impact | No information available. |
| Sensitivity to Static Discharge | No information available. |

Protective equipment and precautions for firefighters

| | |
|---|--|
| Protective equipment and precautions for firefighters | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. |
|---|--|

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| | | | |
|----------------------|--|---|-----------------------------------|
| Personal precautions | Use personal protective equipment as required. | Keep people away from and upwind of spill/leak. | Evacuate personnel to safe areas. |
|----------------------|--|---|-----------------------------------|

Environmental precautions

| | | |
|---------------------------|---|---|
| Environmental precautions | Prevent further leakage or spillage if safe to do so. | Prevent product from entering drains. |
| | Do not flush into surface water or sanitary sewer system. | See Section 12 for additional Ecological Information. |

Methods and material for containment and cleaning up

| | | | |
|-------------------------|--|--|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. | Cover powder spill with plastic sheet or tarp to minimize spreading. | Dike far ahead of liquid spill for later disposal. |
| Methods for cleaning up | Use personal protective equipment as required. | Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. | Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. |
| | Soak up with inert absorbent material. | Clean contaminated surface thoroughly. | Dam up. Pick up and transfer to properly labeled containers. |
| | Sweep up and shovel into suitable containers for disposal. | After cleaning, flush away traces with water. | Take precautionary measures against static discharges. |

7. HANDLING AND STORAGE

Precautions for safe handling

| | | | | | |
|-------------------------|--|--|--|---|---|
| Advice on safe handling | Avoid contact with skin, eyes or clothing. | Use personal protective equipment as required. | Wash contaminated clothing before reuse. | Do not breathe dust/fume/gas/mist/vapors/spray. | Do not eat, drink or smoke when using this product. |
| | Use with local exhaust ventilation. | | | | |

Conditions for safe storage, including any incompatibilities

| | | | |
|------------------------|---|--------------------------------------|----------------|
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. | Keep in properly labeled containers. | Store at 4 °C. |
| Incompatible materials | None known based on information supplied. | | |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



Control parameters

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles. Face protection shield.

Skin and Body Protection

Wear protective gloves and protective clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Solid

Appearance

powder

Odor

characteristic

Property

Values

pH

No information available

Melting point/freezing point

276 °C

Boiling point

582.1 °C

Flash point

226.1 °C

Density

1.7 g/cm³

Evaporation rate

No information available

Upper flammability limits

No information available

Lower flammability limit

No information available

Vapor pressure

0.0

Vapor density

No information available

Specific gravity

No information available

Water solubility

No information available

Solubility in other solvents

No information available

Partition coefficient

1.96

Autoignition temperature

No information available

Decomposition temperature

No information available

Kinematic viscosity

No information available

Explosive properties

No information available

Oxidizing properties

No information available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable

Chemical stability

Stable under recommended storage conditions.



Possibility of Hazardous Reactions None under normal processing.
 Hazardous polymerization No information available.
 Conditions to avoid Extremes of temperature and direct sunlight.
 Incompatible materials Strong oxidizing agents.
 Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation No data available.
 Eye contact No data available.
 Skin Contact No data available.
 Ingestion No data available.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Avoid repeated exposure.
 Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|------------------------|-------|---------|-----|------|
| Kaempferol 520-18-3 | - | Group 3 | - | - |

IARC (International Agency for Research on Cancer)

Not classifiable as a human carcinogen

Numerical measures of toxicity - Product Information

Unknown acute toxicity No information available
 The following values are calculated based on chapter 3.1 of the GHS document
 ATEmix (oral) 100 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity May cause long lasting harmful effects to aquatic life

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability No information available.
 Bioaccumulation No information available.
 Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.
 Contaminated packaging Do not reuse container.
 Other Information Waste codes should be assigned by the user based on the application for which the product was used.



14. TRANSPORT INFORMATION

| | |
|------|---------------|
| DOT | Not regulated |
| IMDG | Not regulated |
| IATA | Not regulated |

15. REGULATORY INFORMATION

International Inventories

All of the components in the product are on the following Inventory lists

Europe (EINECS/ELINCS/NLP) China (IECSC) Philippines (PICCS)

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---------------|------|-----|------|--------|--------|------|-------|------|-------|------|
| Kaempferol | - | - | - | X | - | - | X | - | X | - |

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

16. OTHER INFORMATION



Revision note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet