

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Cycloheximide

Product Number : C7698  
Brand : Sigma

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # : (314) 776-6555

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Actidione  
Naramycin A  
3-[2-(3,5-Dimethyl-2-oxocyclohexyl)-2-hydroxyethyl]glutarimide

Formula : C<sub>15</sub>H<sub>23</sub>NO<sub>4</sub>  
Molecular Weight : 281.35 g/mol

| CAS-No.              | EC-No.    | Index-No.    | Concentration |
|----------------------|-----------|--------------|---------------|
| <b>Cycloheximide</b> |           |              |               |
| 66-81-9              | 200-636-0 | 613-140-00-8 | -             |

**3. HAZARDS IDENTIFICATION****Emergency Overview****OSHA Hazards**

Target Organ Effect, Highly toxic by ingestion, Irritant, Teratogen, Mutagen

**Target Organs**

Nerves., Kidney, Adrenal cortex., Cardiovascular system.

**HMIS Classification****Health Hazard:** 3**Chronic Health Hazard:** \***Flammability:** 0**Physical hazards:** 0**NFPA Rating****Health Hazard:** 3**Fire:** 0**Reactivity Hazard:** 0

## Potential Health Effects

|                   |   |
|-------------------|---|
| <b>Inhalation</b> | May be harmful if inhaled. Causes respiratory tract irritation.   |
| <b>Skin</b>       | May be harmful if absorbed through skin. Causes skin irritation. May be fatal if absorbed through skin. |
| <b>Eyes</b>       | Causes eye irritation.  |
| <b>Ingestion</b>  | May be fatal if swallowed.  |

## 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. Consult a physician.

### In case of eye contact

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

### If swallowed

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

## 5. FIRE-FIGHTING MEASURES

### Flammable properties

Flash point no data available

Ignition temperature no data available

### 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. Discharge into the environment must be avoided.

### Methods for cleaning up

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

## 7. HANDLING AND STORAGE

### Handling

Avoid formation of dust and aerosols.

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

### Storage

Keep container tightly closed in a dry and well-ventilated place.

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 dust mask type N95 (US) or type P1 (EN 143) respirator. 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

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

|        |        |
|--------|--------|
| Form   | powder |
| Colour | beige  |

### Safety data

|   |                   |
|---|-------------------|
| pH  | no data available |
| Melting point                             | 110 °C (230 °F)   |
| 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                          | slightly soluble  |
| Partition coefficient:<br>n-octanol/water | log Pow: 0.55     |

## 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions.

### Materials to avoid

Bases, Strong oxidizing agents, Acid anhydrides, Acid chlorides

### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

## **11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

LD50 Oral - rat - 2 mg/kg

### **Irritation and corrosion**

Skin - rabbit - Skin irritation - 24 h

### **Sensitisation**

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

### **Chronic exposure**

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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.

Laboratory experiments have shown mutagenic effects.

May cause congenital malformation in the fetus.

### **Signs and Symptoms of Exposure**

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

### **Potential Health Effects**

|                      |   |
|----------------------|---|
| <b>Inhalation</b>    | May be harmful if inhaled. Causes respiratory tract irritation.   |
| <b>Skin</b>          | May be harmful if absorbed through skin. Causes skin irritation. May be fatal if absorbed through skin. |
| <b>Eyes</b>          | Causes eye irritation.  |
| <b>Ingestion</b>     | May be fatal if swallowed.  |
| <b>Target Organs</b> | Nerves., Kidney, Adrenal cortex., Cardiovascular system.,   |

### **Additional Information**

RTECS: MA4375000

## **12. ECOLOGICAL INFORMATION**

### **Elimination information (persistence and degradability)**

no data available

### **Ecotoxicity effects**

no data available

### **Further information on ecology**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### 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)

UN-Number: 2811 Class: 6.1 Packing group: I  
Proper shipping name: Toxic solids, organic, n.o.s. (Cycloheximide)  
Marine pollutant: No  
Poison Inhalation Hazard: No

#### IMDG

UN-Number: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A  
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Cycloheximide)  
Marine pollutant: No

#### IATA

UN-Number: 2811 Class: 6.1 Packing group: I  
Proper shipping name: Toxic solid, organic n.o.s. (Cycloheximide)

### 15. REGULATORY INFORMATION

#### OSHA Hazards

Target Organ Effect, Highly toxic by ingestion, Irritant, Teratogen, Mutagen

#### DSL Status

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

|               |                    |
|---------------|--------------------|
| Cycloheximide | CAS-No.<br>66-81-9 |
|---------------|--------------------|

#### SARA 302 Components

|               |                    |                             |
|---------------|--------------------|-----------------------------|
| Cycloheximide | CAS-No.<br>66-81-9 | Revision Date<br>2007-03-01 |
|---------------|--------------------|-----------------------------|

#### 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, Chronic Health Hazard

#### Massachusetts Right To Know Components

|               |                    |                             |
|---------------|--------------------|-----------------------------|
| Cycloheximide | CAS-No.<br>66-81-9 | Revision Date<br>2007-03-01 |
|---------------|--------------------|-----------------------------|

#### Pennsylvania Right To Know Components

|               |                    |                             |
|---------------|--------------------|-----------------------------|
| Cycloheximide | CAS-No.<br>66-81-9 | Revision Date<br>2007-03-01 |
|---------------|--------------------|-----------------------------|

**New Jersey Right To Know Components**

Cycloheximide

CAS-No.  
66-81-9

Revision Date  
2007-03-01

**California Prop. 65 Components**

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.  
Cycloheximide

CAS-No.  
66-81-9

Revision Date  
2007-09-28

**16. OTHER INFORMATION**

**Further information**

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