# SAFETY DATA SHEET

Version 4.14 Revision Date 02/15/2017 Print Date 07/14/2018

# 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Cycloheximide

Product Number : C7698
Brand : Sigma

Index-No. : 613-140-00-8

CAS-No. : 66-81-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 2), H300 Germ cell mutagenicity (Category 2), H341 Reproductive toxicity (Category 1B), H360 Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H300 Fatal if swallowed.

H341 Suspected of causing genetic defects.
H360 May damage fertility or the unborn child.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

understood.

P264 Wash skin thoroughly after handling.

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

P273 Avoid release to the environment.

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

protection.

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse

mouth.

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

P391 Collect spillage. P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

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. : 66-81-9
EC-No. : 200-636-0
Index-No. : 613-140-00-8

**Hazardous components** 

Component	Classification	Concentration
Cycloheximide		
	Acute Tox. 2; Muta. 2; Repr. 1B; Aquatic Acute 2; Aquatic Chronic 2; H300, H341, H360, H411	90 - 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 4. FIRST AID MEASURES

# 4.1 Description of 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.

# 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

#### **5. FIREFIGHTING MEASURES**

# 5.1 Extinguishing media

## Suitable extinguishing media

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

# 5.2 Special hazards arising from the substance or mixture

No data available

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

#### **6. ACCIDENTAL RELEASE MEASURES**

# 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### 6.2 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.

### 6.3 Methods and materials for containment and cleaning up

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

## 6.4 Reference to other sections

For disposal see section 13.

#### 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

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

Recommended storage temperature 2 - 8 °C

Keep in a dry place.

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

#### 8.2 Exposure controls

# Appropriate engineering controls

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

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# Personal protective equipment

# Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

# Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

# **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (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).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Form: powder a) Appearance Colour: beige

b) Odour No data available Odour Threshold No data available c) d) На No data available

Melting point/freezing point

110 °C (230 °F)

Initial boiling point and boiling range

No data available

Flash point No data available

h) Evaporation rate No data available Flammability (solid, gas) No data available i)

Upper/lower No data available i)

flammability or

Sigma - C7698 Page 4 of 8 explosive limits

k) Vapour pressure No data available I) Vapour density No data available m) Relative density No data available n) Water solubility slightly soluble o) Partition coefficient: nlog Pow: 0.55

octanol/water

p) Auto-ignition temperature

No data available

Decomposition temperature

No data available

r) Viscosity No data available s) Explosive properties No data available Oxidizing properties No data available

#### 9.2 Other safety information

No data available

#### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

# 10.5 Incompatible materials

Bases, Strong oxidizing agents, Acid anhydrides, Acid chlorides

#### 10.6 **Hazardous decomposition products**

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

Other decomposition products - No data available

In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

#### **Acute toxicity**

No data available

Inhalation: No data available Dermal: No data available

No data available

#### Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

### Respiratory or skin sensitisation

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

# Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects.

Sigma - C7698 Page 5 of 8 In vitro tests showed mutagenic effects

# Carcinogenicity

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.

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.

## Reproductive toxicity

May cause congenital malformation in the fetus.

Presumed human reproductive toxicant

No data available

# Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

# **Additional Information**

RTECS: MA4375000

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

Liver - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence

# 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

No data available

#### 12.2 Persistence and degradability

No data available

## 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

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

Toxic to aquatic life with long lasting effects.

# 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. 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: II Proper shipping name: Toxic solids, organic, n.o.s. (Cycloheximide)

Reportable Quantity (RQ): Poison Inhalation Hazard: No

**IMDG** 

UN number: 2811 Class: 6.1 Packing group: II EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Cycloheximide)

Marine pollutant:yes

IATA

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

# 15. REGULATORY INFORMATION

# **SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302:

CAS-No. Revision Date 66-81-9 2007-07-01

# **SARA 313 Components**

Cycloheximide

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** 

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Pennsylvania Right To Know Components

CAS-No. Revision Date Cycloheximide 66-81-9 2007-07-01

**New Jersey Right To Know Components** 

Cycloheximide CAS-No. Revision Date 2007-07-01

California Prop. 65 Components

WARNING: This product contains a chemical known to the CAS-No. Revision Date State of California to cause birth defects or other reproductive 66-81-9 2007-09-28

harm.

Cycloheximide

# **16. OTHER INFORMATION**

# Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity
H300 Fatal if swallowed.

H341 Suspected of causing genetic defects. H360 May damage fertility or the unborn child.

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Muta. Germ cell mutagenicity

**HMIS Rating** 

Health hazard: 4
Chronic Health Hazard: \*
Flammability: 0

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Physical Hazard 0

**NFPA Rating** 

Health hazard: 3
Fire Hazard: 0
Reactivity Hazard: 0

#### **Further information**

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# **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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