

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Date of issue: 04/04/2014 Version 1.0

#### **SECTION 1.Identification**

### **Product identifier**

Product number 239763

Product name Cycloheximide

CAS-No. 66-81-9

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

analytical reagent. Uses regulated under FDA or FIFRA are not

affected.

Reagent for research and development

# Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821,

United States of America | General Inquiries: +1-978-751-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

## SECTION 2. Hazards identification

## **GHS Classification**

Germ cell mutagenicity, Category 2, H341 Reproductive toxicity, Category 1B, H360D Acute toxicity, Category 2, Oral, H300 Chronic aquatic toxicity, Category 2, H411

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

## **GHS-Labeling**

Hazard pictograms







Signal Word
Danger

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Hazard Statements

H300 Fatal if swallowed.

H341 Suspected of causing genetic defects.

H360D May damage the unborn child.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.

P273 Avoid release to the environment.

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

P281 Use personal protective equipment as required.

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

Restricted to professional users.

### **OSHA Hazards**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This information is based on 29 CFR 1910.1200 criteria prior to adoption of the GHS and may deviate from the GHS information.

### Other hazards

None known.

# SECTION 3. Composition/information on ingredients

Formula  $C_{15}H_{23}NO_4$  (Hill) Molar mass 281.35 g/mol

## Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

Cycloheximide (>= 90 % - <= 100 % )

66-81-9

Exact percentages are being withheld as a trade secret.

### **SECTION 4. First aid measures**

## Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

After skin contact: wash off with plenty of water. Remove contaminated clothing.

Eye contact

After eye contact: rinse out with plenty of water.

Ingestion

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

# Most important symptoms and effects, both acute and delayed

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We have no description of any toxic symptoms.

# Indication of any immediate medical attention and special treatment needed

No information available.

## **SECTION 5. Fire-fighting measures**

## Extinguishing media

Suitable extinguishing media

Water, Carbon dioxide (CO2), Foam, Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### Special hazards arising from the substance or mixture

Combustible.

Development of hazardous combustion gases or vapors possible in the event of fire.

Fire may cause evolution of:

nitrogen oxides

### Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

### **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### SECTION 7. Handling and storage

### Precautions for safe handling

Work under hood. Do not inhale substance/mixture.

Observe label precautions.

## Conditions for safe storage, including any incompatibilities

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Dry. Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Store at +15°C to +30°C (+59°F to +86°F).

### SECTION 8. Exposure controls/personal protection

### Exposure limit(s)

Contains no substances with occupational exposure limit values.

### **Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

## Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

#### Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

### Eye/face protection

Safety glasses

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

# Respiratory protection

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## SECTION 9. Physical and chemical properties

Physical state solid

Color beige

Odor odorless

Odor Threshold not applicable

pH 4.0 - 5.0 at 20 g/l

68 °F (20 °C)

Melting point 107 - 112 °C

Boiling point No information available.

Flash point No information available.

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Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapor pressure No information available.

Relative vapor density 9.72

Density No information available.

Relative density No information available.

Water solubility 21 g/l

at 36 °F (2 °C)

Partition coefficient: n-

octanol/water

log Pow: 0.55 (experimental)

Bioaccumulation is not expected. (Lit.)

Autoignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

Bulk density ca.290 kg/m³

## SECTION 10. Stability and reactivity

#### Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

## Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents, Strong bases, Acid chlorides, Acid anhydrides

# Conditions to avoid

no information available

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### Incompatible materials

no information available

## Hazardous decomposition products

in the event of fire: See section 5.

### **SECTION 11. Toxicological information**

## Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Target Organs

Kidney

Liver

Gastro-intestinal system

Cardio-vascular system

Reproductive organs

Stomach

Acute oral toxicity

LD50 rat: 2 mg/kg (RTECS)

absorption

Skin irritation

rabbit

Result: slight irritation

(RTECS)

Genotoxicity in vitro

Ames test

Result: negative

(National Toxicology Program)

Mutagenicity (mammal cell test):

Result: positive

(National Toxicology Program)

CMR effects

Mutagenicity:

Suspected of causing genetic defects.

Teratogenicity:

May damage the unborn child.

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

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Carcinogenicity

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

ACGIH No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

#### **Further information**

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

## **SECTION 12. Ecological information**

## **Ecotoxicity**

No information available.

### Persistence and degradability

No information available.

### Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: 0.55 (experimental)

Bioaccumulation is not expected. (Lit.)

## Mobility in soil

No information available.

Additional ecological information

Discharge into the environment must be avoided.

### **SECTION 13. Disposal considerations**

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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# **SECTION 14. Transport information**

Land transport (DOT)

UN number UN 2811

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

Class 6.1
Packing group I
Environmentally hazardous --

Air transport (IATA)

UN number UN 2811

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

Class 6.1
Packing group I
Environmentally hazardous -Special precautions for user no

Sea transport (IMDG)

UN number UN 2811

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

Class 6.1
Packing group I
Environmentally hazardous -Special precautions for user
EmS F-A S-A

## **SECTION 15. Regulatory information**

### **United States of America**

### **OSHA Hazards**

Highly toxic by ingestion

Teratogen Mutagen

Target organ effects

This information is based on 29 CFR 1910.1200 criteria prior to adoption of the GHS, and may deviate from the GHS information on the label and in section 2.

### SARA 311/312 Hazards

Acute Health Hazard Chronic Health Hazard

### **SARA 313**

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 302**

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

302:

Ingredients

Cycloheximide 66-81-9

#### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311,

Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311,

Table 117.3.

**DEA List I** 

Not listed

**DEA List II** 

Not listed

## **US State Regulations**

## Massachusetts Right To Know

Inaredients

Cycloheximide

## Pennsylvania Right To Know

Ingredients

Cycloheximide

### New Jersey Right To Know

Ingredients

Cycloheximide

### California Prop 65 Components

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

Ingredients

Cycloheximide

## **Notification status**

TSCA: Not Listed on TSCA inventory. For Research and Development

Use only. Not For Manufacturing or Commercial Purposes.

DSL: This product contains one or several components that are not on

the Canadian DSL nor NDSL.

## **SECTION 16. Other information**

### Training advice

Provide adequate information, instruction and training for operators.

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

H300 Fatal if swallowed.

H341 Suspected of causing genetic defects.

H360D May damage the unborn child.

H411 Toxic to aquatic life with long lasting effects.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

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The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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