

Reviewed on 01/05/2017

## **1** Identification

- · Product identifier
- · Trade name: Cycloheximide, cell culture reagent
- · Article number: 194527
- · CAS Number:
- 66-81-9
- EC number:
- 200-636-0
- · Molecular Formula C15 H23 N O4
- Molecular Weight 281.36 g/mol
- · Application of the substance / the mixture For Research Use Only
- Details of the supplier of the safety data sheet
   Manufacturer/Supplier: MP Biomedicals, LLC
   29525 Fountain Parkway
   Solon, OH 44139
   United States
   www.mpbio.com
- Information department: Quality Control Department • Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture



GHS06 Skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.



GHS08 Health hazard

Muta. 2H341 Suspected of causing genetic defects.Repr. 1BH360 May damage fertility or the unborn child.

· Label elements

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



· Signal word Danger

• *Hazard-determining components of labeling: Cycloheximide* 

• Hazard statements Fatal if swallowed. Suspected of causing genetic defects. May damage fertility or the unborn child.

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|                      |   | (Contd. of page |
|----------------------|---|-----------------|
| Precautional         |   |                 |
|                      | ive gloves/protective clothing/eye protection/face protection.                    |                 |
|                      | ghly after handling.  |                 |
|                      | rink or smoke when using this product.  |                 |
|                      | al instructions before use.   |                 |
|                      | le until all safety precautions have been read and understood.                    |                 |
|                      | WED: Immediately call a POISON CENTER/ doctor.                                    |                 |
| Specific treat       | tment (see on this label).  |                 |
| IF exposed o         | r concerned: Get medical advice/attention.  |                 |
| Rinse mouth.         |   |                 |
| Store locked         | up.   |                 |
| Dispose of co        | ontents/container in accordance with local/regional/national/international regula | itions.         |
| Classificatio        | n system:   |                 |
| NFPA rating          | rs (scale 0 - 4)  |                 |
|                      | TT 1.1 4  |                 |
|                      | Health = 4  |                 |
|                      | Fire = 0  |                 |
|                      | Reactivity = 0  |                 |
| HMIS-rating          | gs (scale 0 - 4)  |                 |
| HEALTH *             | <sup>4</sup> <i>Health</i> = *4   |                 |
|                      | Fire = 0  |                 |
|                      | Reactivity = $0$  |                 |
|                      |   |                 |
| Other hazard         | ls  |                 |
| <b>Results of Pl</b> | BT and vPvB assessment  |                 |
| PBT: Not ap          | plicable.   |                 |
| vPvB: Not ap         | pplicable.  |                 |
|                      |   |                 |
|                      |   |                 |

- · Chemical characterization: Substances
- · CAS No. Description
- 66-81-9 Cycloheximide
- · Identification number(s)
- · EC number: 200-636-0

### 4 First-aid measures

- · Description of first aid measures
- General information:
- Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area. In case of irregular breathing or respiratory arrest provide artificial respiration.
- After inhalation: If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.
- After skin contact: Wash off with soap and plenty of water. Consult a Doctor.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; immediately call for medical help.
- Information for doctor:

• Most important symptoms and effects, both acute and delayed No further relevant information available.

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• *Indication of any immediate medical attention and special treatment needed No further relevant information available.* 

### **5** Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

### **6** Accidental release measures

- Personal precautions, protective equipment and emergency procedures Use personal protective equipment. 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.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Pick up mechanically, dispose contaminated material as waste according to Section 13.
- **Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

#### 7 Handling and storage

#### · Handling:

- · Precautions for safe handling
- Thorough dedusting.
- Open and handle receptacle with care.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 2-8 °C
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see Section 7.

· Control parameters

- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.

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Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

- Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Not required.

## 9 Physical and chemical properties

| <ul> <li>Information on basic physical and chemical properties</li> <li>General Information</li> </ul> |                           |  |  |
|--|---------------------------|--|--|
| Appearance:  |                           |  |  |
| Form:  | Powder                    |  |  |
| Color:   | Off White                 |  |  |
| · Odor:  | Indeterminate             |  |  |
| • Odor threshold:  | Not determined.           |  |  |
| pH-value:  | Not applicable.           |  |  |
| Change in condition  |                           |  |  |
| Boiling point/Boiling range:   | Undetermined.             |  |  |
| Flash point:   | Not applicable.           |  |  |
| · Flammability (solid, gaseous):   | Product is not flammable. |  |  |
| Ignition temperature:  |                           |  |  |
| Decomposition temperature:   | Not determined.           |  |  |
| Auto igniting:   | Not determined.           |  |  |
| Danger of explosion:   | See section 10            |  |  |
| Explosion limits:  |                           |  |  |
| Lower:   | Not Applicable            |  |  |
| Upper:   | Not Applicable            |  |  |
| · Vapor pressure:  | Not applicable.           |  |  |
| Density:   | Not Applicable            |  |  |
| · Relative density   | Not determined.           |  |  |
| Vapor density  | Not applicable.           |  |  |

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| · Evaporation rate   | Not applicable.                            |                   |
| <ul> <li>Solubility in / Miscibility with</li> <li>Water:</li> </ul> | Not Determined<br>Insoluble.               |                   |
| · Partition coefficient (n-octanol/water): Not determined.           |  |                   |
| · Viscosity:   |  |                   |
| Dynamic:   | Not applicable.                            |                   |
| Kinematic:   | Not applicable.                            |                   |
| · Solvent content:   |  |                   |
| Organic solvents:  | 0.0~%                                      |                   |
| VOC content:   | 0.0 g/l / 0.00 lb/gl                       |                   |
| Solids content:  | 100.0 %                                    |                   |
| • Other information  | No further relevant information available. |                   |

# 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### **11 Toxicological information**

· Information on toxicological effects

- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritant and potentially harmful
- Sensitization: No sensitizing effects known.
- $\cdot$  Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

- · OSHA-Ca (Occupational Safety & Health Administration)
- Substance is not listed.

### **12 Ecological information**

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

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- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- *Mobility in soil* No further relevant information available.
- Additional ecological information:
- · General notes:
- Water hazard class 1 (Self-assessment): slightly hazardous for water
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

# 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Can not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- **Recommendation:** Discard must be made according to official regulations.

| · UN-Number<br>· DOT, ADR, IMDG, IATA | UN2811   |
|---------------------------------------|--|
| UN proper shipping name               |  |
| DOT                                   | Toxic solids, organic, n.o.s. (Cycloheximide)                                    |
| · ADR                                 | 2811 Toxic solids, organic, n.o.s. (Cycloheximide                                |
| ·IMDG                                 | ENVIRONMENTALLY HAZARDOUS<br>TOXIC SOLID, ORGANIC, N.O.S. (Cycloheximide), MARIN |
| · IMDG                                | POLLUTANT  |
| ·IATA                                 | TOXIC SOLID, ORGANIC, N.O.S. (Cycloheximide)                                     |
| · Transport hazard class(es)<br>· DOT |  |
|                                       |  |
| Class                                 | 6.1 Toxic substances   |
| · Label                               | 6.1  |
| · ADR, IMDG                           |  |
|                                       |  |
| V V                                   |  |

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|---|--|
| Label   | 6.1  |
| IATA  |  |
|   |  |
| Class   | 6.1 Toxic substances   |
| Label   | 6.1  |
| Packing group<br>DOT, ADR, IMDG, IATA                             | Ι  |
| Environmental hazards:<br>Marine pollutant:                       | Yes (DOT)<br>Symbol (fish and tree)  |
| Special marking (ADR):  | Symbol (fish and tree)   |
| Special precautions for user                                      | Warning: Toxic substances  |
| EMS Number:   | F-A,S-A  |
| Stowage Category  | В  |
| Transport in bulk according to Annex MARPOL73/78 and the IBC Code | II of<br>Not applicable.   |
| Transport/Additional information:                                 |  |
| DOT   |  |
| Quantity limitations  | On passenger aircraft/rail: 5 kg   |
|   | On cargo aircraft only: 50 kg  |
| Remarks:  | Special marking with the symbol (fish and tree).   |
| ADR   |  |
| Excepted quantities (EQ)  | Code: E5   |
|   | Maximum net quantity per inner packaging: 1 g  |
|   | Maximum net quantity per outer packaging: 300 g  |
| IMDG  | <u>_</u>   |
| Limited quantities (LQ)   | 0  |
| Excepted quantities (EQ)  | Code: E5<br>Maximum not quantity per inner packaging, 1 a  |
|   | Maximum net quantity per inner packaging: 1 g<br>Maximum net quantity per outer packaging: 300 g |
|   |  |
| UN "Model Regulation":  | UN 2811 TOXIC SOLIDS, ORGANIC, N.O.S. (CYCLOHEXIMIDE<br>6.1, I, ENVIRONMENTALLY HAZARDOUS        |

# **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture

· Sara

· Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

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|   | • TSCA (Toxic Substances Control Act):                        |
|---|---|
|   | Substance is not listed.                                      |
| 1 | · Proposition 65  |
|   | · Chemicals known to cause cancer:                            |
|   | Substance is not listed.                                      |
|   | · Chemicals known to cause reproductive toxicity for females: |
|   | Substance is not listed.                                      |

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



· Signal word Danger

| · Hazard-determining components of labeling:  |    |
|---|----|
| Cycloheximide   |    |
| · Hazard statements   |    |
| Fatal if swallowed.   |    |
| Suspected of causing genetic defects.   |    |
| May damage fertility or the unborn child.   |    |
| · Precautionary statements  |    |
| Wear protective gloves/protective clothing/eye protection/face protection.                          |    |
| Wash thoroughly after handling.   |    |
| Do not eat, drink or smoke when using this product.   |    |
| Obtain special instructions before use.   |    |
| Do not handle until all safety precautions have been read and understood.                           |    |
| IF SWALLOWED: Immediately call a POISON CENTER/ doctor.   |    |
| Specific treatment (see on this label).   |    |
| IF exposed or concerned: Get medical advice/attention.  |    |
| Rinse mouth.  |    |
| Store locked up.  |    |
| Dispose of contents/container in accordance with local/regional/national/international regulations. |    |
| · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.                |    |
|   | 05 |

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### **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Quality Control Dept.

· Date of preparation / last revision 01/05/2017 / -

• Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL:** Recommended Exposure Limit Acute Tox. 2: Acute toxicity – Category 2 Muta. 2: Germ cell mutagenicity – Category 2 Repr. 1B: Reproductive toxicity - Category 1B