Ampicillin sodium
Safety Data Sheet
according to Regulation (EU) 2015/830
Date of issue: 01/12/2010        Revision date: 21/09/2017
Supersedes 03/08/2011

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1. Product identifier

1.1. Product identifier

Product form : Article
Trade name : Ampicillin sodium
EC-No. : 200-708-1
CAS-No. : 69-52-3
Product code : A0104
Formula : C16H18N3NaO4S
Synonyms : D-(−)-α-Aminobenzylpenicillin sodium
Product group : Raw material

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
Duchefa Biochemie B.V.
A. Hofmanweg 71
2031 BH Haarlem - The Netherlands
T +31(0)23-5319093 - F +31(0)23-5318027
info@duchefa.nl

1.4. Emergency telephone number

Emergency number
Supplier contact information:
+31(0)23-5319093 (M-F 09:00-17:00)
+31(0)6-30109355 (outside office hours)

<table>
<thead>
<tr>
<th>Organisation/Company</th>
<th>Address</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Health Organization world directory of poison centres</td>
<td><a href="http://apps.who.int/poisoncentres/">http://apps.who.int/poisoncentres/</a></td>
<td>Consult website for a local poison centre</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>H-Phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation, Category 2</td>
<td>H319</td>
</tr>
<tr>
<td>Respiratory sensitisation, Category 1</td>
<td>H334</td>
</tr>
<tr>
<td>Skin sensitisation, Category 1</td>
<td>H317</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16
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Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):

GHS08

Signal word (CLP): Danger
Hazardous ingredients: Ampicillin sodium
Hazard statements (CLP):
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements (CLP):
P261 - Avoid breathing dust, fume, gas, mist, spray, vapours
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ampicillin sodium</td>
<td>(CAS-No.) 69-52-3 (EC-No.) 200-708-1</td>
<td>&gt;= 91</td>
<td>Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Seek medical attention immediately. Remove victim to fresh air.
First-aid measures after skin contact: Seek medical advice. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact: Seek medical advice. Rinse immediately with plenty of water.
First-aid measures after ingestion: Get medical advice/attention. Seek medical attention if ill effect develops.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/effects: Irritating. Exposure may produce an allergic reaction.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition products in case of fire: Under fire conditions, hazardous fumes will be present.

5.3. Advice for firefighters
Precautionary measures fire: Wear proper protective equipment. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Protective equipment: Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.
Measures in case of dust release: Use good housekeeping practices to avoid rendering dust airborne.

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions
Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Dispose in a safe manner in accordance with local/national regulations. Sweep up dry powder and dispose properly.

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Minimize generation of dust.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in dry, cool, well-ventilated area. Moisture sensitive.
Storage temperature: 2 - 8 °C

7.3. Specific end use(s)
For professional use only. Duchefa Biochemie B.V. products are intended only for “in vitro laboratory” research purposes.
**SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

Additional information: Provide local exhaust or general room ventilation

8.2. Exposure controls

**Hand protection:**

<table>
<thead>
<tr>
<th>Type</th>
<th>Material</th>
<th>Permeation</th>
<th>Thickness (mm)</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloves</td>
<td>Nitrile rubber (NBR)</td>
<td>6 (&gt; 480 minutes)</td>
<td>0,11</td>
<td>EN 374</td>
</tr>
</tbody>
</table>

**Eye protection:**
Safety glasses

**Skin and body protection:**
Wear suitable protective clothing

**Respiratory protection:**
In case of insufficient ventilation, wear suitable respiratory equipment. Dust production: dust mask with filter type P2

**SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

- **Physical state:** Solid
- **Appearance:** Powder.
- **Molecular mass:** 371,4 g/mol
- **Colour:** White to slightly yellow.
- **Odour:** No data available
- **Odour threshold:** No data available
- **pH:** No data available
- **pH solution:** 100 (8 - 10) g/l
- **Relative evaporation rate (butylacetate=1):** No data available
- **Melting point:** ≈ 215 °C
- **Freezing point:** No data available
- **Boiling point:** No data available
- **Flash point:** No data available
- **Auto-ignition temperature:** No data available
- **Decomposition temperature:** No data available
- **Flammability (solid, gas):** No data available
- **Vapour pressure:** No data available
- **Relative vapour density at 20 °C:** No data available
- **Relative density:** No data available
- **Solubility:** Water: 50 g/l
- **Log Pow:** No data available
- **Viscosity, kinematic:** No data available
- **Viscosity, dynamic:** No data available
- **Explosive properties:** No data available
- **Oxidising properties:** No data available
Explosive limits : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
No additional information available

10.5. Incompatible materials
Oxidising agents.

10.6. Hazardous decomposition products
When heated to decomposition, emits dangerous fumes. COx. NOx.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Ampicillin sodium (69-52-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Aspiration hazard : Exposure may produce an allergic reaction. May cause irritation to the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Other information : See actual entry in RTECS for complete information: . XH8400000.

SECTION 12: Ecological information

12.1. Toxicity
No additional information available
12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user

- Overland transport
  Not regulated

- Transport by sea
  Not regulated

- Air transport
  Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
  Not applicable
SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations
Contains no substance on the REACH candidate list

15.1.2. National regulations
Ensure all national/local regulations are observed.

Germany
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

Netherlands
SZW-lijst van kankerverwekkende stoffen
SZW-lijst van mutagene stoffen
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

Netherlands
None of the components are listed

Denmark
Recommendations Danish Regulation

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Indication of changes:

<table>
<thead>
<tr>
<th>1.1</th>
<th>Synonyms</th>
<th>Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4</td>
<td>Emergency number</td>
<td>Modified</td>
</tr>
<tr>
<td>5.1</td>
<td>Suitable extinguishing agents</td>
<td>Added</td>
</tr>
<tr>
<td>8.2</td>
<td>Hand protection</td>
<td>Modified</td>
</tr>
</tbody>
</table>

Abbreviations and acronyms:

ATE  Acute Toxicity Estimate
ADR  European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF  Bioconcentration factor
CLP  Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD  Dangerous Preparations Directive 1999/45/EC
DSD  Dangerous Substances Directive 67/548/EEC
IATA  International Air Transport Association
IMDG  International Maritime Dangerous Goods
Ampicillin sodium

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<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>Median lethal concentration</td>
</tr>
<tr>
<td>LD50</td>
<td>Median lethal dose</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOAEC</td>
<td>No-Observed Adverse Effect Concentration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>SDS</td>
<td>Safety Data Sheet</td>
</tr>
</tbody>
</table>


Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>Resp. Sens. 1</td>
<td>Respiratory sensitisation, Category 1</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Skin sensitisation, Category 1</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H334</td>
<td>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

SDS Biochemicals version 2017

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.