

Printing date 05/15/2018

Reviewed on 05/15/2018

1 Identification

- Product identifier
- Trade name: Ampicillin, lyophilized
- Catalog or product number: 1660407, 1660407EDU
- CAS Number: 69-52-3
- EC number: 200-708-1
- Application of the substance / the mixture laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Bio-Rad Laboratories, Life Science Group
2000 Alfred Nobel Drive
Hercules, California 94547
- Information department: lsg_techserv_us@bio-rad.com (510) 741-1000
- Emergency telephone number: 1 (800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT. 510-741-1000

2 Hazard(s) identification

- Classification of the substance or mixture
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2A H319 Causes serious eye irritation.
- STOT SE 3 H335 May cause respiratory irritation.
- Label elements
- Hazard pictograms The substance is classified and labeled according to the Globally Harmonized System (GHS).



GHS07

- Signal word Warning
- Hazard-determining components of labeling:
sodium [2S-[2alpha,5alpha,6beta(S*)]-6-(aminophenylacetamido)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate
- Hazard statements
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- Precautionary statements
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P280 Wear protective gloves / eye protection / face protection.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P362 Take off contaminated clothing.

(Contd. on page 2)

Printing date 05/15/2018

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Trade name: Ampicillin, lyophilized

- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Emergency overview:
- Routes of exposure: Inhalation
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

(Contd. of page 1)

3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description:
69-52-3 sodium [2S-[2alpha,5alpha,6beta(S*)]-6-(aminophenylacetamido)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate
- Identification number(s):
EC number: 200-708-1
- Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

- Description of first aid measures
- General information Immediately remove any clothing soiled by the product.
- After inhalation Supply fresh air; consult doctor in case of complaints.
- After skin contact
- Immediately wash with water and soap and rinse thoroughly.
- After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- Information for doctor
- Most important symptoms and effects, both acute and delayed Breathing difficulty
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Subtle extinguishing agents Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.

(Contd. on page 3)

Printing date 05/15/2018

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Trade name: Ampicillin, lyophilized

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.

(Contd. of page 2)

Protective Action Criteria for Chemicals

PAC-1:

Substance is not listed.

PAC-2:

Substance is not listed.

PAC-3:

Substance is not listed.

7 Handling and storage

Handling

- Precautions for safe handling
- No special measures required.
- Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and receptacles: According to product specification
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- 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 item 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 and hygienic measures

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.
- Breathing equipment:
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- Protection of hands: Protective gloves.
- Material or gloves Synthetic gloves

(Contd. on page 4)

15

Printing date 05/15/2018

Reviewed on 05/15/2018

Trade name: Ampicillin, lyophilized

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.

(Contd. of page 3)

Eye protection:

Safety glasses

Tightly sealed goggles.

9 Physical and chemical properties

Information on basic physical and chemical properties

General information

Appearance:

Form:

Color:

Odor:

Odor threshold:

pH-value:

Change in condition

Melting point/Boiling range:

Boiling point/Boiling range:

Flash point:

Flammability (solid, gaseous)

Decomposition temperature:

Auto igniting:

Danger of explosion:

Explosion limits:

Lower:

Upper:

Vapor pressure:

Density:

Relative density

Vapor density

Evaporation rate

Solubility in / Miscibility with

Water:

Partition coefficient (n-octanol/water):

Viscosity:

kinematic:

Solids content:

Other information

Crystalline
Light yellow
Odorless
Not determined.
Not applicable.
240 °C
undetermined
Not applicable
Product is not flammable.
Not determined.
Not determined.
Product does not present an explosion hazard
Not determined.
Not determined.
Not applicable.
Not determined
Not determined.
Not applicable.
Soluble
Not determined.
Not applicable.
Not applicable.
100.0 %
No further relevant information available.

(Contd. on page 5)

16

Printing date 05/15/2018

Trade name: Ampicillin, lyophilized

Reviewed on 05/15/2018

(Contd. of page 4)

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: Irritant to skin and mucous membranes.
 - on the eye: Irritant effect.
- Sensitization: No sensitizing effects known.
- 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.
- Target organs: Eye.

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
- Additional ecological information:
- General notes: Generally not hazardous for water.
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

(Contd. on page 6)

Printing date 05/15/2018

Trade name: Ampicillin, lyophilized

Reviewed on 05/15/2018

(Contd. of page 5)

13 Disposal considerations

- Waste treatment methods
- Recommendation
 - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
 - Dispose of waste in accordance to applicable national, regional, or local regulations.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- | | |
|--|-----------------|
| UN-Number | |
| DOT, ADR, ADN, IMDG, IATA | Void |
| UN proper shipping name | |
| DOT, ADR, ADN, IMDG, IATA | Void |
| Transport hazard class(es) | |
| DOT, ADR, ADN, IMDG, IATA | Void |
| Class | |
| Packing group | |
| DOT, ADR, IMDG, IATA | Void |
| Environmental hazards: | |
| Marine pollutant: | No |
| Special precautions for user | Not applicable. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |
| UN "Model Regulation": | Void |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)
 - Section 302/304 (40CFR355.30 / 40CFR355.40):
 - Substance not listed.
- Section 313 (40CFR372.65):
- Substance is not listed.
- TSCA (Toxic Substances Control Act):
- Substance is not listed.
- California Proposition 65:
- Substance is not listed.

(Contd. on page 7)

Printing date 05/15/2018

Reviewed on 05/15/2018

Trade name: Ampicillin, lyophilized

	(Cont'd. of page 6)
Chemicals known to cause cancer:	
Substance is not listed.	
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.	
MAK (German Maximum Workplace Concentration)	
Substance is not listed.	
NIOSH-Ca (National Institute for Occupational Safety and Health)	
Substance is not listed.	
National regulations	
Water hazard class: Generally not hazardous for water.	
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.	

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: Environmental Health and Safety.

Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547. 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547. 1(510) 724-7000

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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]

DOT: US Department of Transportation

ATA: International Maritime Code for Dangerous Goods

ACGIH: American Conference of Governmental Industrial Hygienists

ENCS: European Inventory of Existing Chemical Substances

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

REL: Permissible Exposure Limit

PEL: Recommended Exposure Limit

Skin Irrit. 2: Skin Irritation - Category 2

Eye Irrit. 2A: Serious Irritation - Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

* Data compared to the previous version altered.