

Bleomycin sulfate SDS | MSDS

1.PRODUCT AND COMPANY IDENTIFICATION

Product identifier

- **Product Name:** Bleomycin sulfate
- **Catalog Number:** S1214
- **CAS Number:** 9041-93-4
- **IUPAC Name:** --

Relevant identified uses and uses advised against

- **Identified uses:** For research and development use only; laboratory chemicals; manufacture of substances.
- **Uses advised against:** Not for pharmaceutical, household, or other unapproved uses.

Details of the supplier

- **Company :** Selleck Chemicals
- **TollFree :** +1 877 796-6397
- **Tel :** +1 832 582-8158
- **Fax :** +1 832 582-8590

Emergency telephone number

- **Emergency phone #:** +1 832 582-8158

2. Hazard(s) identification

Classification of the substance or mixture:

- GHS08 Health hazard
- Germ cell mutagenicity 1B H340: May cause genetic defects.
- Carcinogenicity 2 H351: Suspected of causing cancer.
- Reproductive toxicity 2 H361: Suspected of damaging fertility or the unborn child.

Label elements:

The substance is classified and labeled according to the Globally Harmonized System (GHS).

Pictogram:



Signal word: Danger

Hazard statements:

- H340: May cause genetic defects.
- H351: Suspected of causing cancer.
- H361: Suspected of damaging fertility or the unborn child.

Precautionary statements:

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P308+P313: IF exposed or concerned: Get medical advice/attention.
- P405: Store locked up.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Information pertaining to particular dangers for man and environment:

N/A

Classification system:

- **NFPA ratings (scale 0 - 4):** Health = 0, Fire = 0, Reactivity = 0
- **HMIS-ratings (scale 0 - 4):** HEALTH *0, FIRE 0, REACTIVITY 0

Other hazards:

- **Results of PBT and vPvB assessment:** PBT: Not applicable; vPvB: Not applicable.
- **Classification according to (d)(1)(ii) of § 1910.1200:** The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.
- **Hazards not otherwise classified:** There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3. Composition/information on ingredients

Chemical characterization: Substances

CAS No. Description: 9041-93-4 Bleomycin (sulfate)

Identification number(s):

- **EC number:** 232-925-2

4. First-aid measures

Description of first aid measures:

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

Most important symptoms and effects, both acute and delayed:

No further relevant information available.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5. Fire-fighting measures

Extinguishing media:

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment. A solid water stream may be inefficient.

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:

Not required.

Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.

Protective Action Criteria for Chemicals:

- **PAC-1:** Substance is not listed.
- **PAC-2:** Substance is not listed.
- **PAC-3:** Substance is not listed.

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

Precautions for safe handling:

No special precautions are necessary if used correctly. Avoid breathing powder/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure. Keep away from sources of ignition. Take precautionary measures against static discharge.

Information about protection against explosions and fires:

No special measures required.

Conditions for safe storage, including any incompatibilities:

- **Storage:** Store in accordance with information listed on the product insert.
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

Specific end use(s):

No further relevant information available.

8. Exposure controls/personal protection

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:

- **Appropriate engineering controls:** No further data; see section 7.

Personal protective equipment:

- **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Store protective clothing separately.
- **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. 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:** Tightly sealed goggles.

9. Physical and chemical properties

Information on basic physical and chemical properties:

- **Physical state:** powder
- **Color:** Not determined.
- **Odor:** Characteristic
- **Structural Formula:** C₅₅H₈₄N₁₇O₂₁S₃ • XHSO₄
- **Molecular Weight:** 1,415.6 g/mol
- **Storage Buffer:** N/A

- **Odor threshold:** Not determined.
- **Formulation:** N/A
- **Melting point/Melting range:** 200 °C (392 °F)
- **Boiling point/Boiling range:** Undetermined.
- **Flammability:** Product is not flammable.
- **Explosion limits:** Lower: Not determined; Upper: Not determined.
- **Flash point:** Not applicable.
- **Decomposition temperature:** Not determined.
- **pH-value:** Not applicable.
- **Viscosity:** Kinematic: Not applicable; Dynamic: Not applicable.
- **SOLUBILITY:** DMF: 2 mg/ml; DMSO: 13 mg/ml; PBS (pH 7.2): 10 mg/ml
- **Solubility in / Miscibility with Water:** Not determined.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Vapor pressure:** Not applicable.
- **Density:** Not determined.
- **Relative density:** Not determined.
- **Vapor density:** Not applicable.
- **Particle characteristics:** Not determined.

Other information:

- **Appearance Form:** powder
- **Ignition temperature:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Evaporation rate:** Not applicable.

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: strong oxidizing agents

Hazardous decomposition products: carbon oxides, hydrogen sulfide, nitrogen oxides

11. Toxicological information

RTECS Number: 9041-93-4 Bleomycin (sulfate) EC5991990

Information on toxicological effects:

• **Acute toxicity:**

- Intraperitoneal LD50: 210 mg/kg (mouse); 240 mg/kg (rat)
- Subcutaneous LD50: 103 mg/kg (mouse); 86 mg/kg (rat)

• **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

• **Sensitization:** No sensitizing effects known.

Additional toxicological information:

• **Interactive effects:** No interactive effects between components are known.

• **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.

• **Alternative sources for toxicological information:** No non-standard sources for toxicological information where used.

12. Ecological information

Toxicity:

• **Aquatic toxicity:** No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Results of PBT and vPvB assessment:

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

Other adverse effects:

• **Additional ecological information:**

• **General notes:** Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

13. Disposal considerations

Waste treatment methods:

- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

- **Recommendation:** Disposal must be made according to official regulations.

14. Transport information

- **UN-Number (DOT, IMDG, IATA):** not regulated
- **UN proper shipping name (DOT, ADN, IMDG, IATA):** not regulated
- **Transport hazard class(es) (DOT, ADN, IMDG, IATA):** Class: not regulated
- **Packing group (DOT, IMDG, IATA):** not regulated
- **Environmental hazards:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **Special precautions for user:** Not applicable.
- **UN "Model Regulation":** not regulated

15. Regulatory information

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

No further relevant information

16. OTHER INFORMATION

Revision Date: 2026/07/07

Further Information: The information provided is believed to be correct but is not exhaustive and should be used only as a guideline based on current knowledge. It does not represent a guarantee of the properties of the product. Selleck Chemicals Corporation and its Affiliates shall not be held liable for any damage resulting from handling or contact with the product.