

# Bleomycin A5 hydrochloride: sc-394413



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Bleomycin A5 hydrochloride  
**Product Number:** sc-394413  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, CA 95060  
800.457.3801 or 831.457.3800  
**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Acute oral toxicity, Category 4  
Acute dermal toxicity, Category 4  
Acute inhalation toxicity - dust/mist, Category 4  
Skin corrosion/irritation, Category 2  
Serious eye damage/eye irritation, Category 2  
Respiratory sensitization, Category 1  
Skin sensitization, Category 1  
Carcinogenicity, Category 2  
Specific target organ systemic toxicity (single exposure), Category 3

#### GHS Label Elements

Pictogram



Signal Word

Danger

#### Hazard Statements

H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer

#### Precautionary Statements - EU (§28, 1272/2008)

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician

P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention
P308 + P313	IF exposed or concerned: Get medical advice/ attention
P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P280	Wear protective gloves/ eye protection/ face protection
P285	In case of inadequate ventilation wear respiratory protection
P264	Wash face, hands and any exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P403 + P233	Store in a well-ventilated place. Keep container tightly closed
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P330	Rinse mouth
P501	Dispose of contents/ container to an approved waste disposal plant
P405	Store locked up
P272	Contaminated work clothing should not be allowed out of the workplace
P363	Wash contaminated clothing before reuse

#### Potential Health Effects

<b>Inhalation</b>	Harmful by inhalation May cause irritation of respiratory tract May cause allergy or asthma symptoms or breathing difficulties if inhaled
<b>Skin</b>	Harmful in contact with skin May cause irritation May cause sensitization by skin contact
<b>Eyes</b>	May cause irritation.
<b>Ingestion</b>	Harmful if swallowed Ingestion may cause irritation to mucous membranes

#### Other Information

Caution - substance not yet tested completely

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Formula:</b>	C57H90ClN19O21S2
<b>Molecular weight:</b>	1440.60
<b>CAS #:</b>	55658-47-4

### 4. FIRST AID MEASURES

#### General advice

If symptoms persist, call a physician.

#### If inhaled

Move to fresh air. If symptoms persist, call a physician.

#### In case of skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

#### In case of eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.

#### If swallowed

Rinse mouth. If symptoms persist, call a physician.

#### Notes to physician

Treat symptomatically.

### 5. FIREFIGHTING MEASURES

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Flammable Properties

Not flammable.

#### Flash Point

Not determined.

#### Explosion Data

<b>Sensitivity to Mechanical Impact</b>	None
<b>Sensitivity to Static Discharge</b>	None

### **Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapors In the event of fire and/or explosion do not breathe fumes May cause sensitization by inhalation and skin contact

### **Special protective equipment for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions**

Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away and upwind from spill/break.

### **Environmental precautions**

Try to prevent the material from entering drains or water courses.

### **Methods and materials for containment and clean up**

Prevent further leakage or spillage if safe to do so. Use personal protective equipment. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically and collect in suitable container for disposal. Avoid dust formation. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

### **Other Information**

Refer to protective measures listed in sections 7 and 8.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

### **Conditions for safe storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers. Store at 4° C.

## **8. EXPOSURE CONTROL/PERSONAL PROTECTION**

### **Exposure guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### **Engineering measures**

Showers. Eyewash stations. Ventilation systems.

### **Personal protective equipment**

#### **Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

#### **Skin and body protection**

No special protective equipment required.

#### **Eye protection**

Tightly fitting safety goggles. Face-shield.

#### **Hygiene measures**

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

Form	no data available	pH	no data available
Melting point/freezing point	no data available	Boiling point	no data available
Flash point	no data available	VOC Content (%)	no data available
Autoignition temperature	no data available	Odor	no data available
Explosion limits	no data available	Vapor pressure	no data available

Density	no data available	Solubility	no data available
Vapor density	no data available	Odor Threshold	no data available
Evaporation Rate	no data available	Decomposition Temperature	no data available

## 10. STABILITY AND REACTIVITY

### Chemical reactivity

Stable under recommended storage conditions.

### Incompatible products

None known based on information supplied.

### Conditions to avoid

None known based on information supplied.

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions - carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), hydrogen chloride (HCl).

### Hazardous polymerization

Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Product Information

Irritating to skin, eyes and/or respiratory tract

#### Potential Health Effects

<b>Inhalation</b>	Harmful by inhalation May cause irritation of respiratory tract May cause allergy or asthma symptoms or breathing difficulties if inhaled
<b>Skin</b>	Harmful in contact with skin May cause irritation May cause sensitization by skin contact
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### Chronic Toxicity

Repeated contact may cause allergic reactions in very susceptible persons Avoid repeated exposure.

### Carcinogenicity

Limited evidence of a carcinogenic effect.

### Sensitization

As a precaution the product should be treated as a sensitizer.

### Target Organ Effects

None known.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

## 13. DISPOSAL CONSIDERATIONS

### Waste disposal methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

### Contaminated packaging

Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### U.S. State Regulations

##### California Proposition 65

This product does not contain any Proposition 65 chemicals.

##### U.S. State Right-to-Know Regulations

None available.

#### International Regulations

##### WHMIS Note:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

## 16. OTHER INFORMATION

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

4/18/2014