

### 1. Product and Company Identification

**Product Code:** 18769  
**Product Name:** Berninamycin A  
**Company Name:** Cayman Chemical Company  
 1180 E. Ellsworth Rd.  
 Ann Arbor, MI 48108  
  
**Web site address:** www.caymanchem.com  
**Emergency Contact:** CHEMTREC Within USA and Canada: +1 (800)424-9300  
 CHEMTREC Outside USA and Canada: +1 (703)527-3887  
**Information:** Cayman Chemical Company +1 (734)971-3335  
**Intended Use:** For research use only, not for human or veterinary use.

### 2. Hazards Identification

**GHS Signal Word:** **None**  
**GHS Hazard Phrases:** Based on evaluation of currently available data this substance or mixture is not classifiable according to GHS.  
  
**GHS Precaution Phrases:** No phrases apply.  
**GHS Response Phrases:** No phrases apply.  
**GHS Storage and Disposal Phrases:** Please refer to Section 7 for Storage and Section 13 for Disposal information.  
**Potential Health Effects (Acute and Chronic):** Material may be irritating to the mucous membranes and upper respiratory tract.  
 May be harmful by inhalation, ingestion, or skin absorption.  
 May cause eye, skin, or respiratory system irritation.  
 To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

### 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	RTECS #
58798-97-3	Berninamycin A	100.0 %	NA

### 4. First Aid Measures

**Emergency and First Aid**
**Procedures:**

**In Case of Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.  
**In Case of Skin Contact:** Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.  
**In Case of Eye Contact:** Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.  
**In Case of Ingestion:** Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

### 5. Fire Fighting Measures

<b>Flash Pt:</b>	No data.
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.
<b>Autoignition Pt:</b>	No data.
<b>Suitable Extinguishing Media:</b>	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.
<b>Unsuitable Extinguishing Media:</b>	A solid water stream may be inefficient.
<b>Fire Fighting Instructions:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.
<b>Flammable Properties and Hazards:</b>	No data available.  No data available.

### 6. Accidental Release Measures

<b>Protective Precautions, Protective Equipment and Emergency Procedures:</b>	Avoid raising and breathing dust, and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
<b>Environmental Precautions:</b>	Take steps to avoid release into the environment, if safe to do so.
<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.

### 7. Handling and Storage

<b>Precautions To Be Taken in Handling:</b>	Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure.
<b>Precautions To Be Taken in Storing:</b>	Keep container tightly closed. Store in accordance with information listed on the product insert.

### 8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
58798-97-3	Berninamycin A	No data.	No data.	No data.

<b>Respiratory Equipment (Specify Type):</b>	NIOSH approved respirator, as conditions warrant.
<b>Eye Protection:</b>	Safety glasses
<b>Protective Gloves:</b>	Compatible chemical-resistant gloves
<b>Other Protective Clothing:</b>	Lab coat
<b>Engineering Controls (Ventilation etc.):</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
<b>Work/Hygienic/Maintenance Practices:</b>	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower. Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ ] Liquid [X] Solid

**Appearance and Odor:** A crystalline solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Flash Pt:** No data.

**Evaporation Rate:** No data.

**Flammability (solid, gas):** No data available.

**Explosive Limits:** LEL: No data. UEL: No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Specific Gravity (Water = 1):** No data.

**Density:** 1.53 g/cm<sup>3</sup>

**Solubility in Water:** No data.

**Percent Volatile:** No data.

**Autoignition Pt:** No data.

**Molecular Formula & Weight:** C<sub>51</sub>H<sub>51</sub>N<sub>15</sub>O<sub>15</sub>S 1146.109

### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [X]

**Conditions To Avoid:** Extremes of temperature and direct sunlight.

**Incompatibility - Materials To Avoid:** Strong oxidizing agents

**Hazardous Decomposition or Byproducts:** Carbon oxides. Nitrogen oxides (NO<sub>x</sub>).

**Polymerization:** Will occur [ ] Will not occur [X]

**Stability Note(s):** Stable if stored in accordance with information listed on the product insert.

### 11. Toxicological Information

**Toxicological Information:** The toxicological effects of this product have not been thoroughly studied.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
58798-97-3	Berninamycin A	n.a.	n.a.	n.a.	n.a.

### 12. Ecological Information

**General Ecological Information:** Avoid release into the environment.  
Runoff from fire control or dilution water may cause pollution.

### 13. Disposal Considerations

**Waste Disposal Method:** Dispose in accordance with local, state, and federal regulations.

### 14. Transport Information

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Not dangerous goods.  
**DOT Hazard Class:**  
**UN/NA Number:**

**LAND TRANSPORT (European ADR/RID):**

**ADR/RID Shipping Name:** Not dangerous goods.  
**UN Number:**  
**Hazard Class:**

**AIR TRANSPORT (ICAO/IATA):**

**ICAO/IATA Shipping Name:** Not dangerous goods.

**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
58798-97-3	Berninamycin A	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
58798-97-3	Berninamycin A	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No

**Regulatory Information Statement:** This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.

### 16. Other Information

**Revision Date:** 12/15/2015

**Additional Information About This Product:** No data available.

**Company Policy or Disclaimer:** DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.