

# SAFETY DATA SHEET

Revision date: December 2016

Version: 2.0

Page 1 of 8

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

**Product Identifier****Material Name:** Chlortetracycline Hydrochloride**Trade Name:** Aureomycin  
**Chemical Family:** Mixture**Relevant Identified Uses of the Substance or Mixture and Uses Advised Against****Intended Use:** Feed additive**Manufacturer/ Supplier:****Huvepharma Inc.**  
1301 Iowa Ave.  
Longmont, CO 80501**Huvepharma Inc.**  
525 Westpark Drive, Suite 230  
Peachtree City, GA 30269**Emergency telephone number: 1-877-994-4883****Contact E-Mail:** customerservice@huvepharma.us

## 2. HAZARDS IDENTIFICATION

**Appearance:** powder**Classification of the Substance or Mixture****GHS - Classification**Acute Oral Toxicity: Category 5  
Reproductive Toxicity: Category 1A**US OSHA Specific - Classification****Physical Hazard:** Combustible Dust**EU Classification:**

EU Indication of danger: Toxic

EU Symbol: T  
R61 - May cause harm to the unborn child.**Label Elements****Signal Word:** Danger  
**Hazard Statements:** May form combustible dust concentrations in air  
H303 - May be harmful if swallowed  
H360 - May damage fertility or the unborn child

## SAFETY DATA SHEET

Material Name: Aureomycin Soluble Powder Concentrate  
Revision date: December 2016

Page 2 of 8  
Version: 2.0

**Precautionary Statements:** P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
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  
P308 + P313 - IF exposed or concerned: Get medical attention/advice  
P405 - Store locked up  
P501 - Dispose of contents/container in accordance with all local and national regulations



### Other Hazards

**Short Term:** May cause allergic reaction May be harmful to aquatic organisms.  
**Known Clinical Effects:** Symptoms of chronic exposure to tetracyclines include redness and swelling of the skin, rash, chills, tooth discoloration, yellowing of the skin and eyes, nausea, vomiting, diarrhea, stomach pain, and chest pain.

### Australian Hazard Classification (NOHSC):

Hazardous Substance. Non-Dangerous Goods.

**Note:** This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Chlortetracycline hydrochloride	64-72-2	200-591-7	Repr. Cat.1;R61	Repro Tox 1A (H360)	10-20

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Inert Ingredients	Not applicable	Not Listed	Not Listed	Not Listed	60-80

**Additional Information:** Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

For the full text of the R phrases and CLP/GHS abbreviations mentioned in this Section, see Section 16

## 4. FIRST AID MEASURES

### Description of First Aid Measures

**Eye Contact:** Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention immediately.

## SAFETY DATA SHEET

Material Name: Aureomycin Soluble Powder Concentrate  
Revision date: December 2016

Page 3 of 8  
Version: 2.0

- Skin Contact:** Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.
- Ingestion:** Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.
- Inhalation:** Remove to fresh air and keep patient at rest. Seek medical attention immediately.

### Most Important Symptoms and Effects, Both Acute and Delayed

- Symptoms and Effects of Exposure:** No data available
- Medical Conditions Aggravated by Exposure:** Breathing dust may worsen asthma symptoms.

### Indication of the Immediate Medical Attention and Special Treatment Needed

- Notes to Physician:** None

## 5. FIRE-FIGHTING MEASURES

- Extinguishing Media:** Extinguish fires with CO2, extinguishing powder, foam, or water.

### Special Hazards Arising from the Substance or Mixture

- Hazardous Combustion Products:** Formation of toxic gases is possible during heating or fire.
- Fire / Explosion Hazards:** During processing, dust may form explosive mixture in air. Fine particles (such as dust and mists) may fuel fires/explosions.

### Advice for Fire-Fighters

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure. Avoid dust formation.

### Environmental Precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

### Methods and Material for Containment and Cleaning Up

- Measures for Cleaning / Collecting:** Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding procedures. Contain the source of the spill if it is safe to do so. Collect spilled material by a method that controls dust generation. Clean spill area thoroughly.
- Additional Consideration for Large Spills:** Avoid generating airborne dust. Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding procedures. Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

## SAFETY DATA SHEET

Material Name: Aureomycin Soluble Powder Concentrate  
Revision date: December 2016

Page 4 of 8  
Version: 2.0

### 7. HANDLING AND STORAGE

Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding and bonding procedures. Avoid open handling. Minimize dust generation and accumulation. When handling, use appropriate personal protective equipment (see Section 8). Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

#### Conditions for Safe Storage, Including any Incompatibilities

**Storage Conditions:** Store at room temperature in properly labeled containers. Keep away from heat, sparks and flames.

**Incompatible Materials:** Strong acids and strong bases

**Specific end use(s):** No data available

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Control Parameters

Refer to available public information for specific member state Occupational Exposure Limits.

#### Chlortetracycline hydrochloride

Zoetis OEL TWA 8-hr

0.5 mg/m<sup>3</sup>

#### Exposure Controls

**Engineering Controls:** Engineering controls should be used as the primary means to control exposures. Use process containment, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

**Personal Protective Equipment:** Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).

**Hands:** Wear impervious gloves as minimum protection.

**Eyes:** Wear safety glasses as minimum protection.

**Skin:** Wear impervious protective clothing when handling this compound.

**Respiratory protection:** If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	powder	<b>Color:</b>	No data available.
<b>Odor:</b>	Fermentation odor	<b>Odor Threshold:</b>	No data available.
<b>Molecular Formula:</b>	Mixture	<b>Molecular Weight:</b>	Mixture
<b>Solvent Solubility:</b>	No data available		
<b>Water Solubility:</b>	Soluble		
<b>pH:</b>	No data available.		
<b>Melting/Freezing Point (°C):</b>	No data available		
<b>Boiling Point (°C):</b>	No data available.		
<b>Partition Coefficient: (Method, pH, Endpoint, Value)</b>			
<b>Decomposition Temperature (°C):</b>	No data available.		
<b>Evaporation Rate (Gram/s):</b>	No data available		
<b>Vapor Pressure (kPa):</b>	No data available		
<b>Vapor Density (g/ml):</b>	No data available		
<b>Relative Density:</b>	No data available		
<b>Viscosity:</b>	No data available		

## SAFETY DATA SHEET

Material Name: Aureomycin Soluble Powder Concentrate  
Revision date: December 2016

Page 5 of 8  
Version: 2.0

### Flammability:

Autoignition Temperature (Solid) (°C):	No data available
Flammability (Solids):	No data available
Flash Point (Liquid) (°C):	No data available
Upper Explosive Limits (Liquid) (% by Vol.):	No data available
Lower Explosive Limits (Liquid) (% by Vol.):	No data available

## 10. STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions of use.
Possibility of Hazardous Reactions	
Oxidizing Properties:	No data available
Conditions to Avoid:	Keep away from heat and other sources of ignition, including electrostatic discharge. Dust may form explosive mixture in air. Fine particles (such as dust and mists) may fuel fires/explosions.
Incompatible Materials:	Strong acids and strong bases
Hazardous Decomposition Products:	Carbon oxides Nitrogen oxides (nox)

## 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

**General Information:** Toxicological properties of the formulation have not been investigated. The information in this section describes the hazards of various forms of the active ingredient. The toxicities of the two materials can be expected to be similar.

### Acute Toxicity: (Species, Route, End Point, Dose)

#### Chlortetracycline hydrochloride

Mouse Oral LD50 2314 mg/kg  
Rat Oral LD50 > 3000mg/kg

#### Oxytetracycline hydrochloride

Mouse Oral LD50 6696 mg/kg  
Mouse SC LD50 > 600mg/kg  
Rat SC LD50 800mg/kg  
Mouse IV LD50 100mg/kg  
Rat IV LD50 302mg/kg

**Acute Toxicity Comments:** A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

#### Oxytetracycline hydrochloride

13 Week(s)	Mouse	Oral	3821 mg/kg/day	NOAEL	None identified
13 Week(s)	Rat	Oral	3352 mg/kg/day	NOAEL	Liver
12 Month(s)	Dog	Oral	125 mg/kg/day	NOAEL	Male reproductive system
24 Month(s)	Dog	Oral	250 mg/kg/day	NOAEL	None identified
14 Day(s)	Oral	108 g/kg	LOEL	Brain	

#### Oxytetracycline hydrochloride

2 Generation Reproductive Toxicity	Rat	Oral	18 mg/kg/day	NOAEL	No effects at maximum dose
Embryo / Fetal Development	Rat	Oral	1500 mg/kg/day	NOAEL	Maternal Toxicity

## SAFETY DATA SHEET

Material Name: Aureomycin Soluble Powder  
Concentrate Revision date: December 2016

Page 6 of 8  
Version: 2.0

### 11. TOXICOLOGICAL INFORMATION

Embryo / Fetal Development Mouse Oral 2100 mg/kg/day NOAEL Embryotoxicity

#### Oxytetracycline hydrochloride

Bacterial Mutagenicity (Ames) *Salmonella* Negative  
*In Vitro* Chromosome Aberration Chinese Hamster Ovary (CHO) cells Negative  
Sister Chromatid Exchange Chinese Hamster Ovary (CHO) cells Negative  
Micronucleus Mouse Negative  
Mammalian Cell Mutagenicity Mouse Lymphoma Positive with activation

#### Oxytetracycline hydrochloride

24 Month(s) Rat Oral, in feed 150 mg/kg/day NOEL Not carcinogenic  
103 Week(s) Mouse Oral, in feed 1372 mg/kg/day NOEL Not carcinogenic

**Carcinogen Status:** None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

### 12. ECOLOGICAL INFORMATION

**Environmental Overview:** Environmental properties of the formulation have not been investigated. Releases to the environment should be avoided. Not expected to bioaccumulate. The following information is available for the individual ingredients.

#### Toxicity:

##### Chlortetracycline hydrochloride

*Daphnia magna* (Water Flea) OECD EC50 48 Hours > 541.1 mg/L  
*Pseudokirchneriella subcapitata* (Green Alga) OECD EC50 72 Hours 0.095 mg/L  
*Oncorhynchus mykiss* (Rainbow Trout) OECD LC50 96 Hours 59.5 mg/L

##### Oxytetracycline hydrochloride

*Oncorhynchus mykiss* (Rainbow Trout) ASTM EPA LC50 96 Hours > 116 mg/L  
*Daphnia magna* (Water Flea) ASTM EPA EC50 48 Hours > 102 mg/L  
*Lepomis macrochirus* (Bluegill Sunfish) ASTM EPA LC50 96 Hours > 94.9 mg/L  
*Selenastrum capricornutum* (Green Alga) ISO EC50 72 Hours 4.18 mg/L

##### Chlortetracycline hydrochloride

*Eisenia foetida* (Earthworm) OECD NOEC 56 Days 1000 mg/kg

**Persistence and Degradability:** No data available

**Bio-accumulative Potential:** No data available

**Mobility in Soil:** No data available

## SAFETY DATA SHEET

Material Name: Aureomycin Soluble Powder Concentrate  
Revision date: December 2016

Page 7 of 8  
Version: 2.0

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods:**

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

### 14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

### 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

**Canada - WHMIS: Classifications**

**WHMIS hazard class:**

Class D, Division 2, Subdivision A



**Inert Ingredients**

CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed

**Chlortetracycline hydrochloride**

CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Australia (AICS):	Present
EU EINECS/ELINCS List	200-591-7

REACH Authorizations: 1.0

### 16. OTHER INFORMATION

Text of R phrases and GHS Classification abbreviations mentioned in Section 3

## SAFETY DATA SHEET

**Material Name:** Aureomycin Soluble Powder Concentrate  
**Revision date:** December 2016

**Page 8 of 8**  
**Version: 2.0**

---

H360 - May damage fertility or the unborn child

R61 - May cause harm to the unborn child.

**Data Sources:** The data contained in this MSDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.

**Reasons for Revision:** Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking. Updated Section 2 - Hazard Identification. Updated Section 3 - Composition / Information on Ingredients. Updated Section 5 - Fire Fighting Measures. Updated Section 7 - Handling and Storage. Updated Section 8 - Exposure Controls / Personal Protection. Updated Section 10 - Stability and Reactivity. Updated Section 11 - Toxicology Information. Updated Section 15 - Regulatory Information.

**Prepared by:** Toxicology and Hazard Communication  
Huvepharma Global Risk Management

Huvepharma Inc. believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

**End of Safety Data Sheet**