

# SAFETY DATA SHEET



## 1. Identification

<b>Product identifier</b>	<b>Oxytetracycline Long Acting Injectable Solution 200 mg/mL</b>
<b>Other means of identification</b>	
<b>Synonyms</b>	Liquamycin LA-200® * Liquamycin® LA-200® * TMLA * LA-200 * Liquamycin * Primamycin * Terramycin * Primamycin LA Injectable Solution * TM LA
<b>Recommended use</b>	Veterinary product used as antibiotic agent
<b>Recommended restrictions</b>	Not for human use
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Company Name (USA)</b>	Zoetis Inc. 10 Sylvan Way Parsippany, New Jersey 07054 (USA)
<b>Rocky Mountain Poison and Drug Center</b>	1-866-531-8896
<b>Product Support/Technical Services</b>	1-800-366-5288
<b>Emergency telephone numbers</b>	CHEMTREC (24 hours): 1-800-424-9300 International CHEMTREC (24 hours): +1-703-527-3887
<b>Company Name (CA)</b>	Zoetis Canada Inc. 16740 Trans-Canada Highway Kirkland, Quebec, H9H 4M7
<b>Emergency telephone number</b>	International CHEMTREC (24 hours): +1-703-527-3887
<b>Contact E-Mail</b>	productsupport@zoetis.com
<b>Product Support</b>	1-800-461-0917

All Safety Data Sheets are available via our Zoetis Canada website at <https://www.zoetis.ca/sds/sds.aspx>

**Supplier** Not available.

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Reproductive toxicity (the unborn child)	Category 1A
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

### Label elements



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Causes skin irritation. Causes serious eye irritation. May damage the unborn child. Harmful to aquatic life with long lasting effects.

## Precautionary statement

### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

### Response

IF exposed or concerned: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

### Storage

Store locked up.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Other hazards

None known.

### Supplemental information

Ingestion of this material may cause effects similar to those generally seen in clinical use of antibiotics including gastrointestinal irritation, vomiting, transient diarrhea, nausea, and abdominal pain. Exposure to sunlight following contact may result in skin reactions in rare instances. 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.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-Pyrrolidone		616-45-5	30-50
Oxytetracycline Dihydrate		6153-64-6	20

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

### Inhalation

Move to fresh air. Call a physician if symptoms develop or persist. For breathing difficulties, oxygen may be necessary.

### Skin contact

Wash off immediately with soap and plenty of water. Remove contaminated clothing. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

### Ingestion

Rinse mouth. Get medical advice/attention if you feel unwell. If ingestion of a large amount does occur, call a poison control centre immediately. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions.

### Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause effects similar to those generally seen in clinical use of tetracyclines including gastrointestinal irritation, nausea, vomiting, and diarrhea.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

### General information

IF exposed or concerned: Get medical advice/attention. For personal protection, see section 8 of the SDS. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting measures

### Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

### Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

### General fire hazards

No unusual fire or explosion hazards noted.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. Ventilate closed spaces before entering them. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

### Methods and materials for containment and cleaning up

Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. Avoid release to the environment.

Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

### Environmental precautions

## 7. Handling and storage

### Precautions for safe handling

Wear personal protective equipment. Provide adequate ventilation. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid accidental injection. Avoid prolonged exposure. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Avoid release to the environment.

### Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. @ 15-30°C (59-86°F). Keep away from heat, sparks and open flame. Do not store in direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### Zoetis

#### Components

#### Type

#### Value

Oxytetracycline Dihydrate  
(CAS 6153-64-6)

TWA

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

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Control banding approach

Not available.

### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

If contact is likely, safety glasses with side shields are recommended.

#### Skin protection

##### Hand protection

Wear protective gloves.

##### Other

Wear suitable protective clothing. Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.

#### Respiratory protection

No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment. 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.

#### Thermal hazards

Not applicable.

### General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

Sterile solution

### Physical state

Liquid.

<b>Form</b>	Liquid.
<b>Colour</b>	Yellow. - Amber.
<b>Odour</b>	Not available.
<b>Odour threshold</b>	Not available.
<b>pH</b>	8.6 - 8.8
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.
<b>Specific gravity</b>	1.11 - 1.17

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Heat, flames and sparks. Sunlight.
<b>Incompatible materials</b>	Strong oxidising agents.
<b>Hazardous decomposition products</b>	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Thermal decomposition products may include oxides of carbon, nitrogen, and sulfur.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics**

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause effects similar to those generally seen in clinical use of tetracyclines including gastrointestinal irritation, nausea, vomiting, and diarrhea. 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.

**Information on toxicological effects**

**Acute toxicity** Ingestion may result in mild gastrointestinal irritation with nausea, vomiting, or diarrhea.

Components	Species	Test results
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2-Pyrrolidone (CAS 616-45-5)

**Acute**

**Oral**

LD50 Rat 6500 mg/kg

Oxytetracycline Dihydrate (CAS 6153-64-6)

**Acute**

**Oral**

LD50 Mouse 7200 mg/kg

**Chronic**

**Oral**

NOAEL Dog 250 mg/kg/day, 24 months (No target organs identified - data for oxytetracycline HCL)

NOEL Mouse 1372 mg/kg/day, 103 weeks (Not carcinogenic - data for oxytetracycline HCL)

Rat 150 mg/kg/day, 24 months (Not carcinogenic - data for oxytetracycline HCL)

**Subchronic**

**Oral**

NOAEL Mouse 3821 mg/kg/day, 13 weeks (No target organs identified - data for oxytetracycline HCL)

Rat 3352 mg/kg/day, 13 weeks (Liver - data for oxytetracycline HCL)

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Respiratory or skin sensitisation**

**Respiratory sensitisation** Not a respiratory sensitizer.

**Skin sensitisation** This product is not expected to cause skin sensitisation.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Mutagenicity**

Oxytetracycline Dihydrate

Bacterial Mutagenicity (Ames), (data for oxytetracycline HCL)  
Result: negative  
Species: Salmonella

In Vitro Chromosome Aberration, (data for oxytetracycline HCL)  
Result: negative  
Species: Chinese Hamster Ovary (CHO) cells

**Mutagenicity**  
Oxytetracycline Dihydrate

Mammalian Cell Mutagenicity, (data for oxytetracycline HCL)  
Result: Positive with activation  
Species: Mouse Lymphoma

Micronucleus, (data for oxytetracycline HCL)  
Result: negative  
Species: Mouse

Sister Chromatid Exchange, (data for oxytetracycline HCL)  
Result: negative  
Species: Chinese Hamster Ovary (CHO) cells

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Reproductive toxicity** May damage the unborn child.

**Developmental effects**  
Oxytetracycline Dihydrate

1500 mg/kg/day Embryo / Fetal Development, (Maternal Toxicity - data for oxytetracycline HCL)  
Result: NOAEL  
Species: Rat  
Organ: Oral

2100 mg/kg/day Embryo / Fetal Development, (Embryotoxicity - data for oxytetracycline HCL)  
Result: NOAEL  
Species: Mouse  
Organ: Oral

**Reproductivity**  
Oxytetracycline Dihydrate

18 mg/kg/day 2 Generation Reproductive Toxicity, (No effects at maximum dose - data for oxytetracycline HCL)  
Result: NOAEL  
Species: Rat  
Organ: Oral

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Due to partial or complete lack of data the classification is not possible. This product may affect Liver. Kidneys. through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

**Further information** Photosensitivity has been reported in some individuals taking tetracyclines. High doses of tetracyclines can cause a liver condition known as fatty liver. Individuals who suffer from high cholesterol, high triglycerides, or have alcoholic liver disease may be more susceptible. May produce kidney toxicity if kidney damage already exists (based on animal data).

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects. Avoid release to the environment.

Components	Species	Test results	
2-Pyrrolidone (CAS 616-45-5)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Oxytetracycline Dihydrate (CAS 6153-64-6)			
<b>Aquatic</b>			
Crustacea	EC50	Whiteleg shrimp (Penaeus vannamei)	> 0.16 mg/l, 48 hours
Fish	LC50	Striped bass (Morone saxatilis)	75 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions** Avoid release to the environment. Do not allow this material to drain into sewers/water supplies. Do not discharge into drains, water courses or onto the ground. 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. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** None known.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

**TDG**  
Not regulated as dangerous goods.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

### 15. Regulatory information

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

#### **Controlled Drugs and Substances Act**

Not regulated.

#### **Export Control List (CEPA 1999, Schedule 3)**

Not listed.

#### **Greenhouse Gases**

Not listed.

#### **Precursor Control Regulations**

Not regulated.

#### **International regulations**

##### **Stockholm Convention**

Not applicable.

##### **Rotterdam Convention**

Not applicable.

##### **Kyoto protocol**

Not applicable.

##### **Montreal Protocol**

Not applicable.

##### **Basel Convention**

Not applicable.

#### **International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information

**Issue date** 14-April-2017

**Version No.** 01

**Disclaimer** Zoetis Inc. believes that the information contained in this 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. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision information** Product and Company Identification: Synonyms  
Composition / Information on Ingredients: Ingredients  
Physical & Chemical Properties: Multiple Properties  
Transport Information: Material Transportation Information  
GHS: Classification