SAFETY DATA SHEET

1. Identification

Product identifier	**Bovatec Lasalocid Sodium Feed Additive Liquid 200g-L**
Other means of identification	
Synonyms	BOVATEC * TAUROTEC * Bovatec 20% * Taurotec 20% * Taurotec Liquid Premix
Recommended use	Veterinary product (Feed additive)
Recommended restrictions	Not for human use

Manufacturer/Importer/Supplier/Distributor information

Company Name (USA)	Zoetis Inc. 10 Sylvan Way Parsippany, New Jersey 07054 (USA)
Rocky Mountain Poison and Drug Center	1-866-531-8896
Product Support/Technical Services	1-888-963-8471
Emergency telephone numbers	CHEMTREC (24 hours): 1-800-424-9300 International CHEMTREC (24 hours): +1-703-527-3887
Company Name (CA)	Zoetis Canada Inc. 16740 Trans-Canada Highway Kirkland, Quebec, H9H 4M7
Emergency telephone number	International CHEMTREC (24 hours): +1-703-527-3887
Contact E-Mail	productsupport@zoetis.com
Product Support	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 identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Serious eye damage/eye irritation	Category 2A
	Reproductive toxicity	Category 1B
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

Label elements

Signal word	Danger
Hazard statement	Harmful if swallowed. Causes serious eye irritation. May damage fertility or 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. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF exposed or concerned: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. 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.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental information None.

Other hazards None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Lasalocid sodium		25999-20-6	20
Propylene glycol		57-55-6	20 - 30*
Water		7732-18-5	

All concentrations are in percent by weight (kg) unless ingredient is a gas. Gas concentrations are in percent by volume (l).

Composition comments *Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
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 if irritation develops and persists.
Ingestion	Call a physician or poison control centre immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconsious person. Rinse mouth.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. 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	Alcohol resistant foam. Powder. Carbon dioxide (CO2).
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. Ventilate the contaminated area. Do not breathe 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.

Methods and materials for containment and cleaning up

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation. Avoid release to the environment. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.

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.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Provide adequate ventilation. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe mist or vapour. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Keep containers tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Occupational exposure limits

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Propylene glycol (CAS 57-55-6)	TWA	155 mg/m3	Vapour and aerosol.
		10 mg/m3	Aerosol
		50 ppm	Vapour and aerosol.

Biological limit values

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

Control banding approach

Lasalocid sodium - Zoetis OEB 3 (control exposure to the range of 10ug/m3 to < 100ug/m3)

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Keep air contamination levels below the exposure limits or within the OEB range listed above in this section. 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. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Impervious gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection should be provided in instances where exposure to dust, mists, aerosols or vapors are likely. If airborne exposures are within or exceed the Occupational Exposure Band (OEB) range, wear an appropriate respirator with a protection factor sufficient to control exposures to the bottom of the OEB range. Chemical respirator with organic vapour cartridge, full facepiece, dust and mist filter.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Keep away from food and drink. 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

Physical state	Liquid.
Form	Liquid.
Colour	Off-white to yellow
Odour	Slight Characteristic odor
Odour threshold	Not available.
pH	5 - 8
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.

Solubility(ies)

Solubility (water)	emulsifiable
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

Dissociation constant	6 (lasalocid sodium)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Specific gravity	1.04

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Keep away from heat, spark, open flames and other sources of ignition.
Incompatible materials	Strong oxidising agents. Strong acids. Bases.
Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Carbon dioxide, carbon monoxide, and oxides of nitrogen.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Prolonged skin contact may cause temporary irritation.
Propylene glycol	Species: Rabbit Severity: Mild

Skin contact

Lasalocid sodium	Species: Rabbit Severity: Non-irritating

Eye contact Causes serious eye irritation.

Lasalocid sodium	Species: Rabbit Severity: Irritant
Propylene glycol	Species: Rabbit Severity: Mild

Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Product	Species	Test Results
Bovatec Lasalocid Sodium Feed Additive Liquid 200g-L		
Acute		
Dermal		
LD50		> 5000 mg/kg (Calculated ATE)
Inhalation		
LC50		> 10 mg/l (Calculated ATE)
Oral		
LD50		610 mg/kg (Calculated ATE)

Components	Species	Test Results
Lasalocid sodium (CAS 25999-20-6)		
Acute		
Dermal		
LD50	Rabbit	1400 mg/kg
Inhalation		
LC50	Rat	2.65 mg/l, 4 hours
Oral		
LD50	Mouse	146 mg/kg
	Rat	122 mg/kg
Chronic		
Oral		
NOAEL	Mouse	120 mg/kg/day, 2 years (Not carcinogenic)
NOEL	Rat	10 mg/kg/day, 2 years (Not carcinogenic)
Subchronic		
Oral		
NOEL	Dog	2 mg/kg/day, 13 weeks (Liver)
	Rat	1 mg/kg/day, 13 weeks (Blood forming organs)
Propylene glycol (CAS 57-55-6)		
Acute		
Dermal		
LD50	Rabbit	20800 mg/kg
Oral		
LD50	Mouse	24900 mg/kg
	Rat	22000 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Corrosivity

Lasalocid sodium	Result: Non-irritating Species: Rabbit

Serious eye damage/eye irritation Causes serious eye irritation.

Eye contact

Lasalocid sodium	Species: Rabbit Severity: Irritant
Propylene glycol	Species: Rabbit Severity: Mild

Respiratory or skin sensitisation

Respiratory sensitisation Not a respiratory sensitiser.

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

Skin Sensitisation

Lasalocid sodium	GPMT Species: Guinea Pig Severity: Negative

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

Mutagenicity

Lasalocid sodium	Chromosome Aberration Result: Negative Species: Fungi Human Lymphocytes In Vitro Bacterial Mutagenicity (Ames) Result: Negative Species: Salmonella , E. coli In Vitro Mammalian Cell Mutagenicity Result: Negative Species: Hamster Lung Cells In Vitro Mitotic Gene Conversion Result: Negative Species: Saccharomyces cerevisiae Unscheduled DNA Synthesis Result: Negative Species: Rat Hepatocyte

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

Reproductive toxicity May damage fertility or the unborn child.

Developmental effects

Lasalocid sodium	0.5 mg/kg/day Embryo / Fetal Development, (Fetotoxicity, Maternal toxicity) Result: NOEL Species: Rabbit Organ: Oral 0.5 mg/kg/day Prenatal & Postnatal Development, (Embryotoxicity) Result: NOAEL Species: Rat Organ: Oral 3 mg/kg/day Embryo / Fetal Development, (Maternal Toxicity) Result: NOEL Species: Rat Organ: Oral

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

Further information Symptoms may be delayed.

12. Ecological information

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

Components		Species	Test Results
Lasalocid sodium (CAS 25999-20-6)			
	EC50	Activated sludge	> 1000 mg/l, 3 hours
	NOEC	Eisenia foetida (Earthworm)	82.4 mg/kg, 28 days [mortality and weight]
			41.2 mg/kg, 28 days [reproduction]
Acute			
	LC50	Eisenia foetida (Earthworm)	143.6 mg/kg
Aquatic			
Acute			
Algae	EC50	Scenedesmus subspicatus (Green Alga)	3.1 mg/l, 72 hours [growth rate]
			2 mg/l, 72 hours [biomass]
Crustacea	EC50	Daphnia magna (Water Flea)	5.4 mg/l, 48 hours
Fish	LC50	Brachydanio rerio (Zebra fish)	2.5 mg/l, 96 hours
Propylene glycol (CAS 57-55-6)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	710 mg/l, 96 hours

Persistence and degradability

Biodegradability

Percent Degradation (Aerobic Biodegradation)

Lasalocid sodium	DT50, Soil (various), Readily biodegradable Result: 0.6-14.2 days OECD 301F, Not readily biodegradable Result: 0% After 28 days

Bioaccumulative potential See below

Partition coefficient n-octanol / water (log Kow)

Lasalocid sodium	2.3, Log P @ pH 7

Bioconcentration factor (BCF)

Lasalocid sodium	56 Predicted, (PBT Profiler)

Mobility in soil This product is miscible in water and may not disperse in soil.

Adsorption

Soil/Sediment Sorption - Log Koc

Lasalocid sodium	2.93 - 3.21 OECD 106

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. 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.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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

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

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No

Country(s) or region	Inventory name	On inventory (yes/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
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
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 01-November-2016

Revision date 22-February-2022

Version No. 03

List of abbreviations ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

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Revision information Identification: Recommended restrictions
Composition / Information on Ingredients: Disclosure Overrides
Composition/information on ingredients: Composition comments
Composition/information on ingredients: Component information
First-aid measures: Ingestion
First-aid measures: General information
Accidental release measures: Methods and materials for containment and cleaning up
Toxicological Information: Toxicological Data
Toxicological information: Further information
Ecological information: Bioaccumulative potential
Ecological information: Mobility in soil
Disposal considerations: Disposal instructions
Regulatory Information: Other
GHS: Classification