

SAFETY DATA SHEET



1. Identification

Product identifier AVATEC /BOVATEC TECHNICAL

Other means of identification None.

Recommended use of the chemical and restrictions on use

Recommended use Veterinary pharmaceutical active

Restrictions on use Not for human use

Details of manufacturer or importer

Manufacturer

Company Name (AU) Zoetis Australia Pty Ltd
 ABN 94 156 476 425
 Level 6, 5 Rider Boulevard
 Rhodes NSW 2138 AUSTRALIA

Tel 1800 814 883
Fax (02) 8876 0444
Email australia.animalhealth@zoetis.com
Emergency Phone 1800 814 883 (all hours)
Police and Fire Brigade Dial 000
If ineffective Dial Poisons Information Centre (13 1126 from anywhere in Australia)

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards Not classified.

Health hazards

Acute toxicity, oral	Category 3
Acute toxicity, dermal	Category 4
Acute toxicity, inhalation	Category 4
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 1B

Environmental hazards

Hazardous to the aquatic environment, acute hazard	Category 2
Hazardous to the aquatic environment, long-term hazard	Category 2

Label elements, including precautionary statements

Hazard symbol(s)



Skull and
crossbones

Health
hazard

Environment

Signal word

Danger

Hazard Statement(s)

Toxic if swallowed. Harmful in contact with skin. Causes serious eye irritation. Harmful if inhaled. May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves/protective clothing. Use personal protective equipment as required.

Response	IF exposed or concerned: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Rinse mouth. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Call a POISON CENTRE or doctor/physician if you feel unwell. 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. Collect spillage.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards which do not result in classification	May form combustible dust concentrations in air.
Supplemental information	None.

3. Composition/information on ingredients

Substance

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Lasalocid Sodium	25999-20-6	90 - 100

4. First-aid measures

Description of necessary first aid measures

Inhalation	Move to fresh air. For breathing difficulties, oxygen may be necessary. Call a POISON CENTRE or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a POISON CENTRE or doctor/physician if you feel unwell. Get medical attention if irritation develops and persists. 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. If eye irritation persists: Get medical advice/attention.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Rinse mouth thoroughly. 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.

Personal protection for first-aid responders For personal protection, see section 8. 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.

Symptoms caused by exposure Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Upper respiratory tract irritation. Coughing. Shortness of breath. Breathing dust may worsen asthma symptoms. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Medical attention and special treatment Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂). Apply extinguishing media carefully to avoid creating airborne dust.

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

Specific hazards arising from the chemical Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for fire fighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

Hazchem Code 2X

General fire hazards May form combustible dust concentrations in air. Fine particles (such as mists) may fuel fires/explosions.

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

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ventilate the contaminated area. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not breathe dust. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8.

Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up Ensure adequate ventilation. Avoid the generation of dusts during clean-up. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Collect spill with an inert, non-combustible absorbent material and transfer to labeled container for disposal. Clean contaminated surface thoroughly. Prevent release to the environment.

Small Spills: Wipe up with a damp cloth and place in container for disposal. 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.

7. Handling and storage

Precautions for safe handling Use only with adequate ventilation. Avoid open handling. Restrict access to work area. Minimise dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. Do not breathe dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. wear personal protective equipment. When using, do not eat, drink or smoke. Wash thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Keep containers tightly closed in a cool, well-ventilated place. < 30C/86F. Keep away from heat and sources of ignition. Do not store in direct sunlight. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls and personal protection

Control parameters Follow standard monitoring procedures.

Occupational exposure limits No exposure limits noted for ingredient(s).

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

Exposure guidelines No exposure standards allocated.

Control banding approach Zoetis OEB 3 (control exposure to the range of 10ug/m3 to < 100ug/m3)

Appropriate engineering controls Ensure adequate ventilation, especially in confined areas. Provide adequate general and local exhaust ventilation. 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. Keep air contamination levels below the exposure limits or within the OEB range listed above in this section. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. It is strongly advised that dedicated areas and containment, such as glove boxes, isolators, and enclosed material transfer systems be used to prevent personnel exposure and spread of contamination. Provide eyewash station.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant 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. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Observe any medical surveillance requirements. When using, do not eat, drink or smoke. 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 Solid.

Form Powder.

Colour White to brown

Odour Not available.

Odour threshold Not available.

pH 3 - 8

Melting point/freezing point 191 - 192 °C (375.8 - 377.6 °F)

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

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) 1.06 g/l

Partition coefficient (n-octanol/water) 2.3 Log P @ pH 7

Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.

Other physical and chemical parameters

Dissociation constant 5.7
Dust explosion properties
Minimum Ignition Energy (MIE) - dust cloud 19 mJ
Explosive properties Not explosive.
Molecular formula C34 H53 Na O8
Molecular weight 612.77
Oxidising properties Not oxidising.

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. Minimise dust generation and accumulation. Dust may form explosive mixture with air. Fine particles (such as dust and mists) may fuel fires/explosions.
Incompatible materials Strong acids. Bases. Strong oxidising agents.
Hazardous decomposition products Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Carbon oxides. Nitrogen oxides (NOx).

11. Toxicological information

Information on possible routes of exposure

Inhalation Harmful if inhaled. Dust may irritate respiratory system.
Skin contact Harmful in contact with skin. Dust or powder may irritate the skin.
 Species: Rabbit
 Severity: Non-irritating

Eye contact Causes serious eye irritation.
 Species: Rabbit
 Severity: Irritant

Ingestion Toxic if swallowed.

Symptoms related to exposure Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Respiratory tract irritation. Coughing. Shortness of breath. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May cause reproductive effects.

Acute toxicity Toxic if swallowed. Harmful if inhaled. Harmful in contact with skin.

Product	Species	Test results
AVATEC /BOVATEC TECHNICAL (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

Product	Species	Test results
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)
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Corrosivity		
Result: Non-irritating		
Species: Rabbit		
Serious eye damage/irritation	Causes serious eye irritation.	
Eye contact		
Species: Rabbit		
Severity: Irritant		
Respiratory or skin sensitisation		
Respiratory sensitisation	Not a respiratory sensitizer.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Skin sensitisation		
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		
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	Due to partial or complete lack of data the classification is not possible.	
Reproductive toxicity	May damage fertility or the unborn child.	
Developmental effects		
0.5 mg/kg/day Embryo / Fetal Development, (Fetotoxicity, Maternal toxicity)		
Result: NOEL		
Species: Rabbit		
Organ: Oral		

Developmental effects

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 or repeated exposure may cause lung injury.

12. Ecological information

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

Product	Species	Test results	
Lasalocid Sodium (CAS 25999-20-6)	EC50	Activated sludge	> 1000 mg/l, 3 Hours (OECD)
		Daphnia magna (Water Flea)	5.4 mg/l, 48 Hours (OECD)
		Scenedesmus subspicatus (Green Alga)	2 mg/l, 72 Hours (OECD)
	LC50	Brachydanio rerio (Zebra fish)	2.5 mg/l, 96 Hours (OECD)
	NOEC	Eisenia foetida (Earthworm)	82.4 mg/kg, 28 Days (OECD)

Persistence and degradability

Biodegradability

Percent degradation (Aerobic biodegradation)

DT50, Soil (various), Readily biodegradable
Result: 0.6-14.2 Days

OECD 301F, Not readily biodegradable
Result: 0% After 28 days

Bioaccumulative potential

Partition coefficient

n-octanol / water (log Kow)

2.3, Log P @ pH 7

Bioconcentration factor (BCF)

56 Predicted, (PBT Profiler)

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 methods	Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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. Contract with a disposal operator licensed by the Law on Disposal and Cleaning.
Residual waste	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. Empty containers should be taken to an approved waste handling site for recycling or disposal

14. Transport information

ADG

UN number	2811
UN proper shipping name	Toxic solid, organic, n.o.s. (Lasalocid Sodium)
Transport hazard class(es)	
Class	6.1
Subsidiary risk	-
Packing group	III
Environmental hazards	Not available.
Hazchem Code	2X
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

UN number	2811
UN proper shipping name	Toxic solid, organic, n.o.s. (Lasalocid Sodium)
Transport hazard class(es)	
Class	6.1
Subsidiary risk	-
Packing group	III
Environmental hazards	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number	2811
UN proper shipping name	Toxic solid, organic, n.o.s. (Lasalocid Sodium)
Transport hazard class(es)	
Class	6.1
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

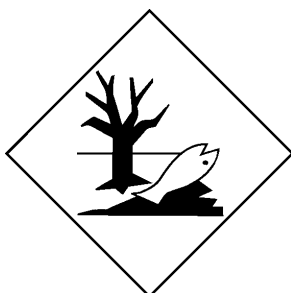
UN number	2811
UN proper shipping name	Toxic solid, organic, n.o.s. (Lasalocid Sodium), MARINE POLLUTANT
Transport hazard class(es)	
Class	6.1
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not applicable.

ADG; IATA; IMDG; RID



Marine pollutant



General information

IMDG Regulated Marine Pollutant. Marine pollutant requirements apply only to quantities >5 Liters for liquids / >5 Kilograms for solids (per inner package) when shipped as per IMDG or ADR (effective year 2015 or greater) regulations. Please refer to the applicable dangerous goods regulations for additional information. Transport according to the requirements of the appropriate regulatory body.

15. Regulatory information

Safety, health and environmental regulations

National regulations

This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

APVMA No. 54144

Poison Schedule (Product): Schedule 6

This SDS replaces version: Issued 20 August 2015

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix C

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)

Not listed.

Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

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 Chemical Substances (AICS)	Yes
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)	Yes
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

Country(s) or region	Inventory name	On inventory (yes/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	10-November-2016
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: Disclosure Overrides Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Transport Information: Material Transportation Information Regulatory Information: Other GHS: Classification