


## Livacox T<sup>®</sup>

### Section 1: Identification of the Substance and Supplier

<b>Product name:</b>	<b>Livacox T</b>
<b>Other name:</b>	Coccidiosis vaccine
<b>ACVM Registration:</b>	A011665
<b>Recommended use:</b>	Poultry vaccine as an aid in the prevention of Coccidiosis induced disease.
<b>Company details:</b>	Pacificvet Limited
<b>Address:</b>	3 Hickory Place Hornby 8042 Christchurch New Zealand
<b>Telephone number:</b>	+64 3 349 8438 (business hours 8:30 am to 5:00 pm)
<b>Emergency telephone:</b>	Pacificvet Limited: 0508 388 388 National Poisons Centre: 0800 764 766 (0800 POISON)
<b>Date of Preparation:</b>	20th February 2023

### Section 2: Hazard Identification

<b>Hazard classifications:</b>	<p>HSNO Approval: HSR101366          HSNO classification          Skin irritation Category 2          Respiratory Sensitizer Category 1          Skin Sensitizer Category 1</p> <p>Not a Dangerous Good according to IATA of NZTA.          Hazchem code: 2Y (recommended)</p>
<b>Pictograms:</b>	
<b>Signal words:</b>	Danger
<b>Hazard statements:</b>	<p>H315 Causes skin irritation          H317 May cause an allergic skin reaction          H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled</p>
<b>Precautionary statements:</b>	<p>P102 Keep out of the reach of children          P103 Read label before use          P261 Avoid breathing mist, spray or vapour</p>

**Section 2: Hazard Identification (continued)**

<b>Precautionary statements:</b>	<p>P264 Wash hands and any exposed skin thoroughly after handling</p> <p>P273 Avoid release to environment</p> <p>P280 Wear protective gloves, eye protection, face protection and protective clothing</p> <p>P285 In the case of inadequate ventilation wear respiratory protection when spray administering the product according to AS/NZS 4501</p>
<b>Prevention statements:</b>	<p>For Animal Treatment</p> <p>P102 Keep out of the reach of children</p> <p>P103 Read label before use</p> <p>P362 Take off contaminated clothing and wash before reuse</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace</p> <p>P280 Wear protective gloves, eye protection, face protection and protective clothing</p> <p>P285 In the case of inadequate ventilation wear respiratory protection when spray administering the product according to AS/NZS 4501</p>
<b>Response statements:</b>	<p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P301 + P321 + P312 <b>IF SWALLOWED:</b> Rinse mouth immediately and drink plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P302 + P352, P333 + P313 <b>IF ON SKIN:</b> Wash immediately with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P321 The Chloramine B component is recorded as a contact sensitizer. Skin exposure to product may cause allergic dermatitis. Wear gloves to avoid accidental contact with the product. Chloramine B is also recorded as causing Allergic Asthma following inhalation.</p> <p>P304 + P341, P342 + P311 <b>IF INHALED:</b> If breath is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.</p> <p>P305 + P351 + P338, P337 + P313 <b>IF IN EYES:</b> Keep eyelid open and <b>immediately rinse</b> with large quantities of water, for at least 5 minutes. Remove contact lenses, if present and easy to do. <b>If eye irritation persists:</b> Get medical advice/ attention.</p> <p>P363 Wash contaminated clothing before reuse.</p>
<b>Storage statements:</b>	<p>P405 Store locked up. Store in unopened bottle in a refrigerator at 2°C to 8°C. Do not freeze.</p> <p>P102 <b>Keep out of the reach of Children.</b></p>
<b>Disposal statements:</b>	<p>P501 Product must be disposed of through an appropriate hazardous waste company. Containers may be recycled if they are clean and free of any harmful residue.</p> <p>P273 Avoid release to the environment</p>

**Section 3: Composition**

<b>Substance characterisation:</b>	Clear Liquid														
<b>Product components:</b>	<table border="1"> <thead> <tr> <th>Name</th> <th>CAS</th> <th>Proportion</th> </tr> </thead> <tbody> <tr> <td>Chloramine B</td> <td>127-52-6</td> <td>≤1.1%</td> </tr> <tr> <td>Water</td> <td>7723-18-5</td> <td>&gt;95%</td> </tr> <tr> <td>Live oocysts of <i>Eimeria</i> species</td> <td>n/a</td> <td>&lt;5%</td> </tr> </tbody> </table> <p>*This is a commercial product and the exact ratio of components may vary.</p>	Name	CAS	Proportion	Chloramine B	127-52-6	≤1.1%	Water	7723-18-5	>95%	Live oocysts of <i>Eimeria</i> species	n/a	<5%		
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Chloramine B	127-52-6	≤1.1%													
Water	7723-18-5	>95%													
Live oocysts of <i>Eimeria</i> species	n/a	<5%													

**Section 4: First Aid Measures**

<b>General:</b>	For advice contact the National Poisons Centre on 0800 POISON (08000 764 766) or a doctor if you feel that you may have been harmed by this product.
<b>Personal precautions protective equipment:</b>	<b>Wear suitable protective clothing such as overalls, gloves, safety glasses and face mask to avoid contact with skin and eyes, when mixing product and administering the product. When spray administering the product use Respiratory Protection according to AS/NZS 4501.</b>
<b>Inhalation:</b>	Reactions in sensitive individuals can occur shortly after exposure to the product and are characterised by difficulty in breathing. The person affected by the product should be moved into the open fresh air and kept at rest in a position comfortable for breathing. Immediate medical attention should be sort if breathing difficulty continues. If medical advice is needed, have this SDS at hand.
<b>Ingestion:</b>	If product is swallowed do NOT induce vomiting, wash mouth with water and give plenty of water to drink. Seek immediate medical advice. If medical advice is needed, have this SDS at hand.
<b>Self-Injection:</b>	Not applicable.
<b>Skin Contact:</b>	Wash product off the skin and flush with lukewarm gently flowing water until product is dislodged. Then wash with soap and water to remove any final traces of the product.
<b>Eye Contact:</b>	If product gets into the eye, keep the eye lid open and rinse immediately with large quantities of lukewarm gently flowing water for 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 5 minutes to remove product. If eye irritation persists: Get medical advice/ attention.

**Most important symptoms and effects, acute and delayed from exposure and medical attention required**

<b>Inhalation:</b>	Product is a potential respiratory irritant and may trigger Asthma symptoms or breathing difficulties in sensitive individuals following inhalation. Any respiratory reaction of difficulty in breathing that cannot quickly be resolved after moving to fresh air requires prompt medical attention.
<b>Ingestion:</b>	Product can be an irritant to digestive tract tissue particularly the intestinal mucosa causing discomfort. Get medical attention.
<b>Skin Contact:</b>	Product can be irritant to the skin and cause contact dermatitis. Product contains Chloramine B as a component that is recorded as a skin sensitiser. Seek medical advice should a skin rash or contact dermatitis develop, advise the practitioner that the product contains Chloramine B a known skin sensitiser.
<b>Eye Contact:</b>	Product can be an irritant to the eyes and causes discomfort and there is the potential to cause eye damage. Should discomfort and irritation of the eye persist after flushing with water to clear the product seek urgent medical attention.

### Section 4: Medical Advice

<b>Advice to Doctor:</b>	<p>The product contains components known to cause a range of symptoms. There is no specific antidote. Treat symptomatically.</p> <p><b>Oral Ingestion:</b> Product has the potential to be an irritant to digestive tract tissue.</p> <p><b>Inhalation:</b> Inhalation of the product may cause Asthma type symptoms of breathing difficulties in sensitive individuals.</p> <p><b>Skin Contact:</b> Product is an irritant to the skin and contains a contact sensitizing component that can cause allergic dermatitis.</p> <p><b>Eye Contact:</b> Potential for Ocular tissue irritation.</p> <p>The product contains a component recorded by the NZ EPA as hazardous. Chloramine B: Skin irritant Category 2, Respiratory sensitizer Category 1 evidence of Allergic Asthma in sensitive individuals and Skin sensitiser Category 1.</p>
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### Section 5: Fire Fighting Measures

<b>Type of hazard:</b>	Not readily combustible. In combustion may emit toxic fumes.
<b>Extinguishing media and methods:</b>	Use extinguishing media suitable to burning materials such as water, foam, dry agent (CO <sub>2</sub> ), sand or dolomite.
<b>HAZCHEM code</b>	1Y (recommended)
<b>Special protective equipment and Precautions</b>	Wear self-contained breathing apparatus.

### Section 6: Spillage and Accidental Release Measures

<b>Personal precautions, protective equipment:</b>	Wear personal protection equipment of overalls, gloves, face mask and safety glasses to prevent skin and eye contact.
<b>Environmental Precautions:</b>	Treat the recovered material as toxic and dispose through an appropriate hazardous waste company. Do not allow product to enter into the surface waterways, surface drainage systems or sewers.
<b>Containment and Clean up</b>	Absorb product spill with paper towels or rags and collect in an appropriate container for disposal in garbage or preferably incinerate residue. Clear contaminated area thoroughly of product residue by wet mopping with suitable disinfectant solution capable of killing <i>Eimeria</i> oocysts, the cleaning residue must be <b>very</b> diluted prior to disposal in the sewage system. Do not release waste cleaning residue to waterways. The vaccine should be considered a biohazard to poultry as it contains a live culture of <i>Eimeria</i> oocysts and disposal should avoid the potential risk of uncontrolled spread to non-vaccinated birds.
<b>Emergency Response:</b>	Does not trigger thresholds.

Section 7: Handling and Storage	
<b>Precautions for safe handling:</b>	Read product label instructions prior to use. <b>Protective clothing such as overalls, gloves, face mask and safety glasses/goggles to prevent contact with the product is recommended.</b>
<b>Regulatory requirements:</b>	Keep out of the reach of children. For animal treatment only. Read label before use. If medical advice is needed: Have product container or label at hand. Obtain special instructions before use.
<b>Handling practices:</b>	All work processes must be undertaken so as to <b>avoid ingestion, skin contact and eye contact with the product. Wear personal protective equipment (PPE)</b> After mixing of the product remove protective clothing and wash hands before eating, drinking, chewing gum or using tobacco.
<b>Certified handlers:</b>	Not applicable.
<b>Conditions for safe storage:</b>	<b>KEEP OUT OF THE REACH OF CHILDREN.</b> Store in the original container in a refrigeration unit between 3 and 7°C. Do not Freeze.
<b>Store site requirements:</b>	Not subject to a Hazardous Substances Emergency Response Plan.
<b>Packaging:</b>	Store only in original packaging with lid sealed. Once seal is broken use all of the product.
<b>Specific end use:</b>	Only to be used according to the directions on the label.

Section 8: Exposure Controls/Personal Protection	
	
<b>Workplace Exposure Standards:</b>	A workplace exposure standard (WES) has not been established by WorkSafe New Zealand for this product.
<b>Engineering Controls:</b>	Exposure can be reduced by use of personal protective equipment and increasing the ventilation.
<b>Personal Protective Equipment:</b>	Guidance from AS/NZS 1716 Occupational Respiratory Protection, AS/NZS 4501 Occupational Protective Clothing, AS/NZS 2161 Occupational Protective Gloves, AS/ NZS 1336 Occupational Eye Protection and AS/NZS 2210 Occupational Protective Footwear is recommended.
<b>Eye/Face Protection:</b>	Wear suitable face mask and goggles to prevent product from entering the eyes and nose.
<b>Skin Protection:</b>	Suitable overalls and gloves are to be worn. Single-use gloves of natural rubber or natural latex may be used. Overalls must be washed prior to reuse.
<b>Respiratory Protection:</b>	Recommended that a filter mask is worn that is appropriate to limit exposure to product spray mists if spray administering the vaccine.
<b>General Hygiene:</b>	Always observe good personal hygiene measures, such as washing hands after handling the product and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## Section 9: Physical and Chemical Properties

<b>Appearance:</b>	Clear liquid
<b>Odour:</b>	No distinct odour
<b>Odour threshold:</b>	Does not apply
<b>pH:</b>	No data
<b>Freezing/ Melting Point:</b>	No data
<b>Boiling Point:</b>	No data
<b>Flash Point:</b>	No data
<b>Flammability:</b>	No data
<b>Explosive limits:</b>	Does not apply
<b>Fire Hazard Properties:</b>	Does not readily burn
<b>Vapour pressure:</b>	Does not apply
<b>Vapour density:</b>	Does not apply
<b>Specific gravity or density:</b>	No data available
<b>Solubility:</b>	100% in water
<b>Partition coefficient:</b>	Does not apply
<b>Auto-ignition temperature:</b>	Does not apply
<b>Decomposition temperature:</b>	Does not apply
<b>Viscosity:</b>	Does not apply
<b>Particle characteristics:</b>	No data available

## Section 10: Stability and Reactivity

<b>Reactivity:</b>	Unlikely to react or decompose under normal storage.
<b>Stability:</b>	Stable stored under recommended conditions.
<b>Conditions to avoid:</b>	Do not freeze product - will destroy the active component of the <i>Eimeria</i> oocysts
<b>Incompatible materials:</b>	Not applicable
<b>Hazardous Decomposition Materials:</b>	No data. The following might be expected in small quantities: Nitrogen oxides (NO <sub>x</sub> ), ammonia (NH <sub>3</sub> ) and hydrogen chloride (HCl)
<b>Hazard Reactions:</b>	Product will not auto-polymerize.

**Section 11: Toxicological Information**

<b>Toxicological Information:</b>	<p><b>No data available for product.</b></p> <p>Acute toxicity via Oral exposure - no data available for this product</p> <p><b>Component ingredients have recorded:</b></p> <p><b>Chloramine B CAS No. 127-52-6</b></p> <p>Acute toxicity is considered to be LD<sub>50</sub> Oral Rat: 1150mg/kg bw. Source ECHA REACH data base.</p> <p><b>Chloramine B:</b> Allergy Asthma and <b>Respiratory sensitisation Category 1, Skin sensitisation Category 1</b> and <b>Skin irritation Category 2</b> Source: NZ EPA, HSR 101366.</p> <p>ECHA REACH data base Acute oral toxicity Category 4, Skin irritant Category 2, Eye irritant Category 2, Respiratory Sensitiser Category 1, Skin sensitiser Category 1 and Specific target organ toxicity – single exposure Category 3 affecting lungs. Aquatic environment acute Category 1.</p>
<b>Acute toxicity via Oral:</b>	Based on available date, the classification criteria are not met when considering the component ingredients of the product as there is no actual data for the product.
<b>Acute toxicity via Dermal:</b>	Based on available data the product is not classified as toxic via the dermal route when considering the component ingredient of Chloramine B, as there is no actual data for the product.
<b>Acute toxicity via Inhalation:</b>	No data available. Considered that the classification criteria are not met for the product.
<b>Skin Corrosivity / Skin Irritation</b>	No data available for product. Based on available data for the product component of Chloramine B the product is classified as a <b>Skin irritant Category 2</b> .
<b>Eye Corrosivity / Eye Irritation</b>	No data available. Considered that the classification criteria are not met.
<b>Respiratory or Skin Sensitisation:</b>	Classified as <b>Skin sensitiser Category 1</b> and <b>Respiratory Sensitiser Category 1</b> the product is classified as a sensitizer due to Chloramine B component being present at above the 0.1% level.
<b>Germ Cell Mutagenicity:</b>	Not classified as a mutagen.
<b>Carcinogenicity:</b>	Not classified as a carcinogen.
<b>Reproductive toxicity:</b>	Not classified as a reproductive toxin.
<b>Specific Target Organ Toxicity – single exposure:</b>	Product not classified as causing specific organ damage from single exposure. The component of Chloramine B has been identified as causing transient lung tissue irritation that resolves.
<b>Specific Target Organ Toxicity – repeated exposure:</b>	Product not classified as causing organ damage from repeated exposure. The component of Chloramine B has been identified as causing transient lung tissue irritation that resolves.
<b>Aspiration Hazard:</b>	Not classified as causing an aspiration hazard.
<b>Acute and chronic health effects:</b>	None recorded for the product.
<b>Skin Contact short term exposure:</b>	Available data indicates product could be irritating to skin. Symptoms in include redness, skin burning sensation and a rash.
<b>Skin Contact long term exposure:</b>	Product has potential for contact sensitisation. Chloramine B has been linked with skin sensitization following repeat exposure. Resulting in allergic contact dermatitis.
<b>Eye Contact short term exposure:</b>	Product may cause Ocular tissue irritation; symptoms include discomfort and a burning sensation. Resolving if the product is promptly removed from the eye tissue.
<b>Eye Contact long term exposure:</b>	No data for the product has been recorded for health effects from multiple accidental contact events in the eye.

### Section 11: Toxicological Information (continued)

<b>Ingestion effects:</b>	The Product may be irritating to mucous membranes causing transient discomfort. Swallowing small amounts should not be harmful.
<b>Respiratory sensitisation short term exposure:</b>	No data for product. Respiratory reactions have been noted following inhalation of the component ingredient Chloramine B.
<b>Respiratory sensitisation long term exposure:</b>	No data recorded for repeat exposure health effects associated with long term inhalation.
<b>Aspiration hazard exposure effect:</b>	No data linking the product as an aspiration hazard.
<b>Specific Target Organ Toxicity effect:</b>	No data linking the product as a specific toxicant to any organs of the body.

### Section 12: Ecological Information

<b>Toxicity to aquatic and terrestrial plants and animals:</b>	<p><b>No data available for product's Aquatic toxicity:</b></p> <p><b>Chloramine B CAS No. 127-52-6</b></p> <p>Acute fish toxicity LC<sub>50</sub> 17.6 mg/L 96 hours species not specified, source ECHA</p> <p>Acute algae toxicity EC<sub>50</sub> 0.029 mg/L 72 hours in freshwater algae, source ECHA</p>
<b>Persistence and degradability:</b>	Components are considered to be non-persistent in an aquatic environment. Release of the product at the recommended mixed concentration (drinking water solution) into waste water and sewage treatment facilities should not disturb the biodegradability of activated sludge.
<b>Bioaccumulation potential:</b>	No indication of bioaccumulation potential.
<b>Mobility in soil:</b>	No data available.
<b>Ecotoxicity Hazard Statements:</b>	Slightly harmful in the Aquatic Environment. Avoid release into Waterways. Does not trigger the hazard threshold for Ecotoxicity in the Soil environment and is not a hazard for Terrestrial Vertebrates or Terrestrial Invertebrates.

### Section 13: Disposal Considerations

<b>Disposal method:</b>	Avoid disposal of unused vaccine it is best to use the product. Product must be disposed of through an appropriate hazardous waste company. This product is NOT suitable for disposal by either landfill or via sewers, drains, natural streams or rivers. This product should be incinerated directly in appropriate equipment.
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### Section 14: Transport Information

<b>UN Number:</b>	This product is not classified as a Dangerous Good by the NZTA or IATA.
<b>HAZCHEM Code:</b>	2Y (recommended)
<b>Special Precautions for transport:</b>	Transport in original packaging with lid sealed in a chilly bin to maintain temperature at 2 to 8°C. Do not freeze.
<b>Health and Safety at Work (Hazardous Substances) Regulations 2017</b>	Not subject to a Hazardous Substances Emergency Response Plan.



### Section 15: Regulatory Information

<b>ERMA Register Approval Number:</b>	APP203705, APP203847 linked to APP204200.
<b>HSNO Controls:</b>	Approval HSR101366
<b>Approved Handlers Certificate:</b>	Not required
<b>Workplace Exposure Standards (WES):</b>	Not applicable
<b>ACVM controls:</b>	Registered pursuant to the ACVM Act 1997, No. A11665. See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration conditions.
<b>Health and Safety at Work (Hazardous Substances) Regulations 2017</b>	Not subject to a Hazardous Substances Emergency Response Plan.

### Section 16: Other Information

<b>Additional Information:</b>	This product is to be used only in accordance with the directions provided on the product label and instruction sheet.	
<b>Warning:</b>	<p>The information provided in this Safety Data Sheet is based on current knowledge of the Health and Safety Hazard of the product detailed in this SDS.</p> <p>While all information supplied in this SDS is believed to be accurate this does not constitute a warranty by Pacificvet Limited for the information. The company disclaims any liability resulting from the use of this information.</p> <p>The product user is responsible for the appropriate and intended handling, use and disposal of the product.</p> <p>If clarification or further information is need to ensure that an appropriate risk assessment can be made prior to use of the product in the workplace, the user should contact Pacificvet Limited.</p> <p>The information contained in this SDS is only safety related information, for all other product information please refer to the product label and instruction sheet.</p>	
<b>Version issued:</b>	20th February 2023 and is valid for 5 years from this date.	
<b>Revision history:</b>	Date of Revision	Reason
	20 <sup>th</sup> February 2023	Transfer to GHS classification

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