

MS-Bac[®]

Section 1: Identification of the Substance and Supplier

Product name:	MS-Bac
Other name:	Mycoplasma Synoviae vaccine
ACVM Registration:	A005274
Recommended use:	For the immunisation of chickens against <i>Mycoplasma Synoviae</i> infections
Company details:	Pacificvet Limited
Address:	3 Hickory Place Hornby 8042 Christchurch New Zealand
Telephone number:	+64 3 349 8438 (business hours 8:30 am to 5:00 pm)
Emergency telephone:	Pacificvet Limited: 0508 388 388 National Poisons Centre: 0800 764 766 (0800 POISON)
Date of Preparation:	16th May 2018

Section 2: Hazard Identification

Hazard classifications:	<p>HSNO classification Veterinary Medicine (Limited Pack Size, Finished Dose Group Standard 2017 HSNO Approval: HSR100757 6.1E aspiration hazard 6.1E dermal 9.1D slightly harmful in the aquatic environment</p> <p>Not a Dangerous Good according to IATA of NZTA. Hazchem code: 2Y (recommended)</p>
Pictograms:	
Signal words:	Danger
Hazard statements:	<p>H304 May be fatal if swallowed and enters airways H313 May be harmful in contact with skin H402 Harmful to aquatic life</p>
Precautionary statements:	<p>P102 Keep out of the reach of children P103 Read label before use P280 Wear protective gloves and protective clothing</p>

Section 2: Hazard Identification (continued)

Prevention statements:	For Animal Treatment P102 Keep out of the reach of children P103 Read label before use P272 Avoid release to the environment
Response statements:	P101 If medical advice is needed, have the product container or label at hand. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician P331 Do NOT induce vomiting P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P314 Get medical advice/attention if you feel unwell.
Storage statements:	P405 Store locked up. Store in unopened bottle in a refrigerator at 2° to 8°C. Do not freeze.
Disposal statements:	Product must be disposed of through an appropriate hazardous waste company.
Other hazards:	Accidental injection or self-injection may result in severe pain and swelling, particularly if injected into a joint or finger. Seek prompt medical advice even if only a very small amount is injected. If pain persists for more than 12 hours after medical examination, seek medical advice again. The product contains mineral oil which acts as an irritant when accidentally injected, causing a severe inflammatory response.

Section 3: Composition

Substance characterisation:	White oil emulsion		
Product components:	Name	CAS	Proportion
	Inactivated <i>Mycoplasma Synoviae</i> bacterium		15-30%
	Light Mineral Oil	8042-47-5	>70%
	Aracel-83	8007-43-0	5 - 10%
	Tween-80	900-65-6	< 1%
	Formalin solution	50-00-0	0.16%
	Other components are below reportable levels.		

Section 4: First Aid Measures

General:	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.
Personal precautions protective equipment:	Wear suitable protective clothing such as overalls and gloves to avoid contact on the skin by the product.
Inhalation:	Significant inhalation exposure is considered unlikely. Aspiration of the product liquid into lungs is a potential hazard with the associated risks of exogenous lipid pneumonia caused by the mineral oil component acting as an irritant.
Ingestion:	May be fatal if swallowed and enters airways. Immediately seek medical advice if aspiration is suspected. If product is swallowed do NOT induce vomiting. Product is mildly irritating to the mucous membranes of the gastrointestinal tract but is unlikely to cause anything more than mild transient discomfort and have a laxative effect.
Self-Injection:	Accidental injection or self-injection may result in severe pain and swelling, particularly if injected into a joint or finger. Seek prompt medical advice even if only a very small amount is injected. If pain persists for more than 12 hours after medical examination, seek medical advice again.
Skin Contact:	Flush with lukewarm gently flowing water for 5 minutes or until product is removed. Then wash with soap and water to remove final traces. Seek medical attention if skin reaction occurs.
Eye Contact:	If product gets into the eye, keep the eye lid open and rinse immediately with large quantities of lukewarm gently flowing water for at least 15 minutes or until product is removed. Remove contact lenses, if present and easy to do. If eye irritation develops seek medical advice/ attention.

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

Inhalation:	Aspiration of product liquid into lungs is a risk and could lead to exogenous lipid pneumonia. Urgent Medical advice is required in suspected cases.
Ingestion:	Product is an Aspiration hazard and may be fatal if swallowed and enters airways. Any breathing issue following ingestion requires urgent medical investigation. Product may cause a mild transient laxative effect and discomfort. Seek medical advice if digestive upset continues.
Self-injection:	Product is an irritant in puncture wounds. Potential of severe inflammatory response. Seek urgent medical attention. If pain and inflammatory response continues after the initial medical examination, seek medical attention again, as surgical debridement of the wound site may be required to remove product from the tissue.
Skin Contact:	Seek medical advice should a skin rash or contact dermatitis develop following skin contact with the product.
Eye Contact:	Should discomfort and irritation of eye persist after flushing with water to clear the product seek urgent medical attention.
Advice to Doctor:	<p>The product contains mineral oil known to cause a persistent inflammatory response when injected into tissue. Even if only small amounts have been accidentally injected, this product can cause intense swelling and lipogranuloma formation, which may result in necrosis and even loss of a digit. Prompt surgical attention is required and may necessitate early incision and irrigation of the wound area, especially when there is involvement of the finger tissue or tendons.</p> <p>In very rare cases of ingesting the product there is the potential for exogenous lipid pneumonia due to the possibility of aspiration of the oil component into the lungs. Ciliary clearance of product from the tracheobronchial tree is also disrupted by the mineral oil component.</p>

Section 5: Fire Fighting Measures

Type of hazard:	Product and packaging not readily combustible. In case of fire may liberate: Toxic or flammable decomposition vapours are expected. Incomplete combustion is likely to give rise to carbon monoxide and unidentified organic and inorganic compounds.
Extinguishing media and methods:	Use extinguishing media suitable to burning materials such as water fog, foam, dry agent (CO ₂), sand or dolomite. Avoid water jet as this will spread the fire.
HAZCHEM code	2Y (recommended)
Special protective equipment and Precautions	Wear self-contained breathing apparatus.

Section 6: Spillage and Accidental Release Measures

Personal precautions, protective equipment:	Wear personal protection equipment such as gloves and overalls to prevent skin contact.
Environmental Precautions:	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.
Containment and Clean up	Use absorbent material such as paper or cloth to collect product and place in appropriate containers for disposal. Clear contaminated area thoroughly of product residue by wet mopping using Detergent in warm water, the cleaning residue should be diluted prior to disposal in sewage system. Product residue is a slippery hazard if left on floor surfaces.
Emergency Response:	Does not normally trigger thresholds as spillage will generally be single bottles.

Section 7: Handling and Storage

Precautions for safe handling:	Read product label instructions prior to use. Wear protective clothing such as overalls and gloves to prevent contact on the skin by the product.
Regulatory requirements:	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.
Handling practices:	No special control measures for handling this product. Wear protective clothing such as overalls and gloves to prevent contact on the skin by the product.
Approved handlers:	Not applicable
Conditions for safe storage:	Keep out of the reach of children. Store in closed original container in a locked /secured refrigerator at 2° to 8°C. Do not freeze. Use with 10 hours of opening bottle.
Store site requirements:	Not Subject to a Hazardous Substances Emergency Response Plan.
Packaging:	Store only in original packaging. Once seal is broken use all of the product.
Specific end use:	Only to be used according to the directions on the label.

Section 8: Exposure Controls/Personal Protection

Workplace Exposure Standards:	A workplace exposure standard (WES) has not been established by WorkSafe New Zealand for this product.
Engineering Controls:	Exposure can be reduced by use of personal protective equipment.
Personal Protective Equipment:	Guidance from AS/NZS 4501 Occupational Protective Clothing, AS/NZS 2161 Occupational Protective Gloves and AS/NZS 2210 Occupational Protective Footwear is recommended.
Eye/Face Protection:	Eye and Face Protection is not generally required.
Skin Protection:	Suitable overalls and gloves are to be worn. Single-use gloves of natural rubber or natural latex may be used. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with product. Dispose of contaminated gloves in appropriate disposal system. Overalls should be washed prior to reuse.
Respiratory Protection:	Respiratory Protection not generally required.
General Hygiene:	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

Appearance:	Pale Yellow to White liquid
Odour:	Odourless
Odour threshold:	Does not apply
pH:	6 - 8
Freezing/ Melting Point:	No data, likely to be in the range from 0°C to -4°C due to mineral oil content
Boiling Point:	No data, likely be above 220°C
Flash Point:	No data, expected to be >160°C
Flammability:	Not flammable
Explosive limits:	Does not apply
Fire Hazard Properties:	Combustible
Vapour pressure:	No data available
Vapour density:	No data available
Specific gravity or density:	No data available
Solubility:	Miscible emulsion
Partition coefficient:	No data available
Auto-ignition temperature:	No data available, likely >260°C
Decomposition temperature:	No data available
Kinematic viscosity:	No data available
Particle characteristics:	No data available

Section 10: Stability and Reactivity

Reactivity:	Unlikely to react or decompose under normal storage.
Stability:	Stable stored under recommended conditions. Do not freeze – dispose of product if frozen
Conditions to avoid:	None for handling of product.
Incompatible materials:	Strong oxidizing agents
Hazardous Decomposition Materials:	No data available
Hazard Reactions:	Product will not auto-polymerize

Section 11: Toxicological Information

Toxicological Information:	No data available for product. Component ingredients have recorded: Light White Mineral Oil: Acute toxicity Dermal: >2,000 mg, Source: ECHA Polysorbate 80: Acute toxicity LD ₅₀ Oral Rat >63.840 mg/kg Source: NCBI USA
Acute toxicity via Oral:	Based on available data, the classification criteria are not met when considering the component ingredients of the product, as there is no actual data for the product.
Acute toxicity via Dermal:	Classified as 6.1E . Mineral Oil component is considered may be harmful in contact with skin.
Acute toxicity via Inhalation:	No data available. Considered that the classification criteria are not met.
Skin Corrosivity / Skin Irritation	No data available. Considered that the classification criteria are not met.
Eye Corrosivity / Eye Irritation	No data available. Considered that the classification criteria are not met.
Respiratory or Skin Sensitisation:	Not classified as a Respiratory or Skin Sensitiser.
Germ Cell Mutagenicity:	Not classified as a mutagen.
Carcinogenicity:	Not classified as a carcinogen.
Reproductive toxicity:	Not classified as a reproductive toxin.
Specific Target Organ Toxicity – single exposure:	Not classified as causing specific organ damage.
Specific Target Organ Toxicity – repeated exposure:	Not classified as causing organ damage from repeated exposure.
Aspiration Hazard:	Classified 6.1E aspiration hazard as kinematic viscosity of refined pharmaceutical mineral oils (hydrocarbon derivative) sits in the range of ≤ 20.5 mm ² /s measured at 40°C and there is medical evidence of aspiration of mineral oil into the lungs following ingestion of mineral oil when used as a laxative.
Acute and chronic health effects:	None recorded
Skin Contact short term exposure:	Available data indicates product could be irritating to skin. Symptoms include redness and a rash.
Skin Contact long term exposure:	No data recorded for long term repeat exposure, assume there is potential for contact dermatitis from repeat exposure.
Eye Contact short term exposure:	Product may cause mild eye irritation when in contact with the eye and symptoms include discomfort. Resolving once the product is removed.
Eye Contact long term exposure:	No data recorded for health effects from multiple accidental contact events in the eye.

Section 11: Toxicological Information (continued)

Ingestion effects:	Swallowing the product has the risk of Aspiration into the lungs (see below). Generally small amounts of the product being swallowed should not be harmful. Product is mildly irritating to mucous membranes but is unlikely to cause anything more than mild transient discomfort and have a laxative effect.
Aspiration hazard exposure effect:	Droplets of product aspirated into the lungs through an accidental ingestion event may cause exogenous lipoid pneumonia caused by the mineral oil component acting as an irritant.
Specific Target Organ Toxicity effect:	No data linking product as a specific toxicant to any organs of the body.

Section 12: Ecological Information

Toxicity to aquatic and terrestrial plants and animals:	No data available for product Aquatic toxicity: Light Mineral Oil CAS No. 8042-47-5 Acute fish toxicity $LC_{50} \geq 100$ mg/L 96 hours species <i>Oncorhynchus mykiss</i> (rainbow trout) static test LC_{50} (OECD Test Guideline 203) Acute crustacea toxicity $LC_{50} \geq 100$ mg/L 48 hours <i>Daphnia magna</i> (water flea) static test (OECD Test Guideline 202)
Persistence and degradability:	Components are considered to non-persistent in an aquatic environment.
Bioaccumulation potential:	No indication of bio-accumulation potential.
Mobility in soil:	No data available.
Ecotoxicity Hazard Statements:	9.1D Slightly harmful in the Aquatic Environment. 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

Disposal method:	Preferably dispose of the product by use. 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

UN Number:	This product is not classified as a Dangerous Good by the NZTA or IATA.
HAZCHEM Code:	2Y (recommended)
Special Precautions for transport:	Transport in original packaging with lid sealed.
Health and Safety at Work (Hazardous Substances) Regulations 2017	Not subject to a Hazardous Substances Emergency Response Plan .

Section 15: Regulatory Information

ERMA Register Approval Number:	Not applicable
HSNO Controls:	Approval HSR 100757 Veterinary Medicine Limited Pack Size, Finished Dose Group Standard 2017
Approved Handlers Certificate:	Not required
Workplace Exposure Standards (WES):	Not applicable
ACVM controls:	Registered pursuant to the ACVM Act 1997, No. A05274. See www.foodsafety.govt.nz for registration conditions.

Section 16: Other Information

Additional Information:	This product is to be used only in accordance with the directions provided on the product label and instruction sheet.	
Warning:	<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.</p>	
Version issued:	16th May 2018 and is valid for 5 years from this date.	
Revision history:	Date of Revision	Reason