



# SAFETY DATA SHEET

Product Name: BOSS® Injection

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

<b>Product name:</b>	BOSS ® Injection for Cattle
<b>ACVM approval code:</b>	A010830
<b>Recommended use:</b>	For the treatment and control of internal parasites, including, lungworm and lice in cattle.
<b>Company name:</b>	Alleva Animal Health Limited
<b>Address:</b>	15 Calman Place, Birkenhead, Auckland
<b>Telephone:</b>	0064-9-4181405
<b>Emergency telephone number:</b>	National Poisons Centre: 0800 764 766 (0800 POISON)  Fire Service, Ambulance: Dial 111

## SECTION 2: HAZARDS IDENTIFICATION

The manufacturer has stated that this substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

EPA Approval Code: - HSR100643

### Pictograms



Toxic



Chronic



Ecotoxic

Signal Word: **DANGER**



HSNO Class.	Hazard Code	Hazard Statement	GHS Category
6.1D	H302	Harmful if swallowed.	Category 4
6.5B	H317	May cause an allergic skin reaction.	Category 1
6.6B	H341	Suspected of causing genetic defects.	Category 2
6.8B	H361	Suspected of damaging fertility or the unborn child.	Category 2
6.9A	H372	Causes damage to organs through prolonged or repeated exposure.	Category 1
9.1A	H400	Very toxic to aquatic life.	Category 1
9.2C	H423	Harmful to the soil environment.	-
9.3B	H432	Toxic to terrestrial vertebrates.	-
9.4A	H441	Very toxic to terrestrial invertebrates.	-

**Prevention Code      Prevention Statement**

P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing.
P281	Use personal protective equipment as required.

**Response Code      Response Statement**

P310	Immediately call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

**Storage Code      Storage Statement**

P405	Store locked up.
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**Disposal Code      Disposal Statement**

P501	Dispose of according to Local Regulations or Authorities
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### SECTION 3: COMPOSITION

<b>Product form:</b>	Liquid	
<b>Product Components:</b>		
<b>Name</b>	<b>CAS</b>	<b>Proportion</b>
Ivermectin	70288-86-7	0.7% w/v
Eprinomectin	123997-26-2	0.7% w/v
Levamisole Phosphate	32093-35-9	22.3% w/v
Glycerol Formal	4740-78-7	>5.0% w/v
Butylated hydroxytoluene	128-37-0	<1.0% w/v
Other ingredients		to 100%

### SECTION 4: FIRST AID MEASURES

<b>Necessary first aid measures:</b>	<p><b>General Information:</b> Remove victim from contaminated area. If there is a risk of unconsciousness, position and transport in a stable lateral position. Take container/label or MSDS for identification.</p> <p><b>Skin Contact:</b> Immediately remove all contaminated clothing, including footwear. Wash with water for 15 minutes. Seek medical attention if irritation persists.</p> <p><b>Eye Contact:</b> Immediately wash open eye in a flow of water for at least 15 minutes. Seek medical assistance.</p> <p><b>Ingestion:</b> Rinse mouth with water. Seek immediate medical assistance. DO NOT induce vomiting. Never give anything by mouth to an unconscious person.</p> <p><b>Inhalation:</b> Remove patient to fresh air, avoid breathing vapours yourself. If not breathing apply resuscitation. Seek medical assistance.</p>
<b>Workplace facilities:</b>	No special facilities required.



<b>Required instructions:</b>	Observe good work practices and avoid skin and eye contact. Wash hands and exposed skin before meals and after use. Do not eat or drink while using. Launder protective clothing separately from other clothing and before each reuse.
<b>Notes for medical personnel:</b>	There is no specific antidote. Apply symptomatic therapy.

### SECTION 5: FIRE FIGHTING MEASURES

<b>Type of hazard:</b>	Non-flammable, combustible, non-explosive
<b>Fire hazard properties:</b>	Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.
<b>Regulatory requirements:</b>	Not applicable
<b>Extinguishing media and methods:</b>	Sprayed water jet, foam, dry chemical powder CO2 and sand. Do not allow water to enter drains.
<b>Hazchem code:</b>	2X
<b>Recommended protective clothing:</b>	Fire fighters should wear self-contained breathing apparatus in enclosed areas. Fight fire in the early stages if it is safe to do so.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Wear suitable protective clothing. Restrict access to contaminated area.
<b>Environmental Precautions:</b>	Contain the spill and prevent further dispersion. Prevent contamination of water courses and sewers.
<b>Procedure for Spills:</b>	Retrieve intact containers from the site. Place damaged containers into containment devices. Absorb spills with inert material and place in waste containers. Wash the area with water and absorb further inert material. Collect spilled material and place in sealable containers for subsequent disposal.



<b>Procedure for Disposal:</b>	Contaminated material must be disposed of at an approved landfill or other approved facility in accordance with local, regional and national requirements. Avoid contamination of any water supply with product or empty container.
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## SECTION 7: HANDLING AND STORAGE

<b>Precautions for safe handling:</b>	<ul style="list-style-type: none"> <li>• Administer with well-maintained and calibrated equipment. Handle with care</li> <li>• Do not handle until all safety precautions have been read and fully understood.</li> <li>• Obtain special instructions before use.</li> <li>• Do not breathe fumes, vapours or spray.</li> <li>• Wash hands thoroughly after handling.</li> <li>• Do not eat, drink or smoke when using this product.</li> <li>• Contaminated work clothing should not be allowed out of the workplace.</li> <li>• Avoid release to the environment.</li> <li>• Wear protective clothing.</li> <li>• Use personal protective equipment as required.</li> </ul>
<b>Regulatory requirements:</b>	N/A
<b>Handling practices:</b>	N/A
<b>Approved handlers:</b>	Not required
<b>Conditions for safe storage:</b>	Store under refrigeration (<25°C). Keep out of reach of children. Keep locked away so that unauthorised persons do not have access. Keep away from food, drink and animal feeding stuffs.
<b>Store site requirements:</b> Environmentally hazardous substance, liquid, n.o.s.	This substance is subject to a requirement for a Level 3 emergency management plan, secondary containment and signage, whenever



	it is held in quantities of 100L or more. See Hazardous Substances (Emergency management) regulations 25 to 42.
<b>Packaging:</b>	Packaging as per schedule 3 (Hazardous Substances Packaging Regulations) for quantities > 5L. UN Packaging Group III.

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance mg/m <sup>3</sup>	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	
Butylated hydroxytoluene [128-37-0]	-	10	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

<b>Engineering controls:</b>	Use in well-ventilated area
<b>Personal protection:</b>	<p><b>Respiratory protection:</b> Not required.</p> <p><b>Hand protection:</b> Protective gloves for chemical use including nitriles.</p> <p><b>Eye protection:</b> Safety chemical goggles should be worn.</p> <p><b>Hygiene procedures:</b> Keep the place of work clean. Avoid contact with product. Keep working clothes separate. Change badly soiled or soaked clothing. Wash hand before breaks and at the end of work. Remove contaminated protective clothing. Keep away from food stuffs, drinks and tobacco.</p>

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



<b>Specific product data:</b>	Appearance: clear to pale yellow solution
	Odour: mild odour
	Specific Gravity / Density: n/a
	Boiling Point: n/a
	pH: n/a
	Solubility in Water: highly soluble
	Flashpoint: >93°C
	Oxidising Properties: n/a
	Corrosive Properties: n/a
	Vapour Pressure: n/a
<b>Required specifications:</b>	N/A
<b>Further specifications:</b>	N/A
<b>Specific advice:</b>	N/A

## SECTION 10: STABILITY AND REACTIVITY

<b>Stability of the substance:</b>	Stable under normal conditions of storage and use
<b>Conditions to avoid:</b>	No specific conditions to avoid
<b>Material to avoid:</b>	Store only in the container supplied. Use the recommended delivery equipment.
<b>Hazardous decomposition products:</b>	None if stored and handled correctly

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>Acute effects:</b>	<u>Ivermectin</u> LD50 (Oral-rats) = 51.8mg/kg LD50 (Dermal-rats) = 660mg/kg <u>Eprinomectin</u> LD50 (Oral-rats) = 55mg/kg LD50 (Dermal-rabbits) = 406mg/kg <u>Levamisole</u> LD50 Oral Mouse 205-285mg/kg LD50 Oral Rat 458-1095mg/kg LD50 Oral Rabbit 458mg/kg
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**Skin:** May cause an allergic skin reaction.

**Chronic Reproductive:** Suspected of causing genetic defects.  
Suspected of damaging fertility or the unborn child.

**Systemic:** Causes damage to organs through prolonged or repeated exposure.

## SECTION 12: ENVIRONMENTAL INFORMATION

<b>Ecotoxicity effects:</b>	Ivermectin and Eprinomectin are highly toxic to fish and extremely toxic to aquatic invertebrates. Very toxic to terrestrial invertebrates.  Levamisole is potentially toxic to terrestrial vertebrates.
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HSNO Classes: 9.1A = Very toxic to aquatic life.  
9.2C = Harmful to the soil environment.  
9.3B = Toxic to terrestrial vertebrates.  
9.4A = Very toxic to terrestrial invertebrates.

Do not allow to enter waterways.

## SECTION 13: DISPOSAL CONSIDERATIONS

<b>Product disposal:</b>	Preferably dispose of product by use in accordance with label directions. Otherwise dispose of product at an approved landfill, or other approved facility in accordance with local, regional and national regulations. Avoid contamination of any water supply with product.
<b>Container disposal:</b>	Dispose of empty containers by wrapping in paper and putting in garbage for disposal at an approved landfill, or other approved facility in accordance with local, regional and national regulations. Avoid contamination of any water supply with empty container.



## SECTION 14: TRANSPORT INFORMATION

<b>UN No.:</b>	3082
<b>Class:</b>	9
<b>Packing Group:</b>	III
<b>Hazchem Code:</b>	2X
<b>Proper Shipping Name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Ivermectin and Eprinomectin)
The maximum quantity per package of this substance allowed for carriage on public transport is 1L	

This product is classified as a Dangerous Good for transport in NZ: NZS 5433:2012

## SECTION 15: REGULATORY INFORMATION

<b>Regulatory status:</b>	Registered pursuant to the ACVM Act 1997, No. A010830 See <a href="http://www.nzfsa.govt.nz/acvm">www.nzfsa.govt.nz/acvm</a> for registration conditions. Approved pursuant to the HSNO Act, Approval Code HSR100643 See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for approval conditions. SDS is required for quantities greater than or equal to 0.1L
<b>List exposure limits:</b>	N/A

### HSNO controls:

Trigger quantities for this substance:

	<b>Trigger Quantity</b>
Approved Handler	Not required as per controls
Location Certificate	Not applicable
Tracking Trigger Quantities	Not required as per controls
Signage Trigger Quantities	100L(9.1A)
Emergency Response Plan trigger Quantities	100L(9.1A)



## **SECTION 16: OTHER INFORMATION**

This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. ALLEVA Animal Health Limited makes no warranty with respect hereto and disclaims all liability from reliance thereon.

Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

**PLEASE READ ALL LABELS CAREFULLY BEFORE USING PRODUCT.**

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