1. IDENTIFICATION OF SUBSTANCE & COMPANY

Product information

Product name	Equitak
Other names	None
ACVM approval	A007962
HSNO approval	HSR100554
UN number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (contains Abamectin)
Packaging group	III
Hazchem code	3Z
Uses	A broad spectrum wormer for horses

Company Details

Company	**Bayer New Zealand Ltd**
Address	3 Argus Place, Hillcrest, Auckland 0627 New Zealand.
Telephone	0800 652 488
Facsimile	0800 229 838

Emergency Telephone Number: 0800 734 607

2. HAZARD IDENTIFICATION

Approval

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR100554), and is classified as follows:

Classes	Hazard Statements
6.1D (oral)	Harmful if swallowed.
6.8B	Suspected of damaging fertility or the unborn child
6.8C	May cause harm to breast-fed children.
9.1A	Very toxic to aquatic life.
9.2C	Harmful to the soil environment.
9.3C	Harmful to terrestrial vertebrates.
9.4A	Very toxic to terrestrial invertebrates.

SYMBOLS

WARNING

Other Classifications

ACVM registration number: A007962

This substance may cause eye irritation and skin sensitisation.

Precautionary Statements

Keep out of reach of children.
Read label before use.
Store locked up.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe vapours.
Avoid contact during pregnancy/while nursing.
Use personal protective equipment as required.
Avoid release to the environment.
Collect spillage.

Further precautionary statements can be found in Section 4 – First Aid.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS/ Identification	Concentration
Abamectin	71751-41-2	4mg/mL
Praziquantel	55268-74-1	50mg/mL
Benzyl alcohol	100-51-6	1-5%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. FIRST AID

General Information

You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). If medical advice is needed, have product container or label at hand. IF exposed or concerned: Get medical advice.

Recommended first aid facilities Ready access to running water is recommended. Accessible eyewash is recommended.

Exposure

Swallowed IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs.

Eye contact If product gets in eyes, wash material from them with running water for several minutes. If symptoms persist, seek medical advice.

Skin contact IF ON SKIN: Wash with plenty of soap and water. If skin rash occurs: Get medical advice. Wash contaminated clothing before reuse.

Inhaled Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor

Treat symptomatically

5. FIREFIGHTING MEASURES

Fire and explosion hazards:	There are no specific risks for fire/explosion for this chemical. It is non-flammable.
Suitable extinguishing substances:	Carbon dioxide, extinguishing powder, foam.
Unsuitable extinguishing substances:	Unknown.
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide, oxides of nitrogen and sulphur and smoke. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Hazchem code:	3Z

6. ACCIDENTAL RELEASE MEASURES

Containment	If greater than 100L is stored, secondary containment and emergency plans to manage any potential spills must be in place.In all cases design storage to prevent discharge to stormwater.
Emergency procedures	For a large spill (>10L): Stop the source of the leak, if safe to do so. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain using sand, earth or vermiculite. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately). In the event of a large spillage alert the fire brigade to location and give brief description of hazard.
Clean-up method	Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Disposal	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

7. STORAGE & HANDLING

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Store in original container only. Containers should be kept closed in order to minimise contamination. Store in a cool (<30°C), dry, well ventilated place. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIVE EQUIPMENT

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by the NZ Department of Labour for this product. There is a general limit of 10mg/m^3 for dusts and mists when limits have not otherwise been established.

	Ingredient	WES-TWA	WES-STEL
NZ Workplace Exposure Stds (OSH – DoL 2011)	No ingredients listed	NA	NA

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes	Avoid contact with eyes. Use safety glasses and or chemical splash goggles if splashes are possible.
Skin	Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves. Nitrile or rubber gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling.
Respiratory	A respirator when airborne concentrations approach the WES (section 8). Use a organic vapour cartridge with a particulate filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

Not applicable

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Smooth thick pale cream to tan coloured paste
Odour	Oatmeal odour
pH	No data
Vapour pressure	No data
Viscosity	No data
Boiling point	No data
Volatile materials	No data
Freezing / melting point	No data
Solubility	No data
Specific gravity / density	No data
Flash point	Non flammable
Danger of explosion	Not explosive
Auto-ignition temperature	No data
Upper & lower flammable limits	No data
Corrosiveness	Non corrosive

10. STABILITY & REACTIVITY

Stability	Stable
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Incompatible groups	Strong oxidisers
Substance Specific Incompatibility	None known
Hazardous decomposition products	Oxides of carbon, nitrogen and sulphur.
Hazardous reactions	None known

11. TOXICOLOGICAL INFORMATION

Summary

IF SWALLOWED: May cause nausea, vomiting, abdominal pain and discomfort, anorexia, diarrhoea, headache, dizziness and fever. Drowsiness, insomnia and skin rashes have also been reported.

IF IN EYES: Contact may cause temporary stinging or redness.

IF ON SKIN: Contact may cause skin sensitiser.

IF INHALED: Similar to symptoms if swallowed.

Supporting Data

Acute	**Oral**	LD_{50} (oral, rat) for the mixture is between 300 and 2000 mg/kg. Data considered includes: Abamectin 8.7-12.8 mg/kg (rat), Praziquantel 1050mg/kg (rat), Oxfendazole: 1600 mg/kg (dog), 6400mg/kg (rat, mouse) Benzyl alcohol 1040 mg/kg bw (rabbit).
	Dermal	No evidence of dermal toxicity.
	Inhaled	No evidence of inhalation toxicity.
	Eye	The mixture is not considered to be an eye irritant.
	Skin	The mixture is not considered to be a skin irritant.
Chronic	**Sensitisation**	Not classified by EPA as a sensitiser. Contains benzyl alcohol (>0.1%) which is a known contact sensitiser.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No ingredient present at concentrations > 0.1% is considered a carcinogen.
	Reproductive / Developmental	Abamectin is suspected of causing fetotoxicity and teratogenic effects. Abamectin is also suspected to have an effect on or via lactation.
	Systemic	No ingredient present at concentrations > 1% is considered a target organ toxicant.
	Aggravation of existing conditions	None known.

12. ECOLOGICAL DATA

Summary

This substance has been assessed by EPA and found to be extremely toxic in the aquatic environment and towards terrestrial invertebrates. It is considered harmful to terrestrial vertebrates.

Supporting Data

Aquatic	This substance is classified 9.1A by EPA. The EC_{50} values is <1%. Data available: Abamectin 0.430g/L (48hr, Eastern Oyster (Crassostrea virginica)), 0.0036 mg/l (96hr, Rainbow trout), 0.00034 mg/l (48hr, Daphnia magna),

Bioaccumulation	No data
Degradability	No data
Soil	This mixture is considered harmful in the soil environment. Abamectin is highly toxic to dung beetle larvae.
Terrestrial vertebrate	This substance is classed 9.3C, see acute toxicity.
Terrestrial invertebrate	The mixture has been classified by EPA as very ecotoxic to terrestrial vertebrates. The calculated invertebrate ecotoxicity value for the mixture is < 2 µg/bee. Abamectin has a LD_{50} (bee): 0.002µg/bee
Biocidal	no data
Environmental effect levels	No EELs are available for this mixture or ingredients

13. DISPOSAL CONSIDERATIONS

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

14. TRANSPORT INFORMATION

Transport according to NZS 5433 (Transport of Hazardous Substances on Land. Considered a dangerous good for transport.

UN number:	3082	**Proper shipping name:**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (contains Abamectin)
Class(es):	9	**Packing group:**	III
Precautions:	Ecotoxic.	**Hazchem code:**	3Z

15. REGULATORY INFORMATION

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR100554.

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:	
MSDS	To be available within 10 minutes in workplaces storing > *any quantity.*
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Required if > 100L is stored.
Approved handler	Not required.
Tracking	This substance is required to be tracked if > *not required is present. (*NA)
Bunding & secondary containment	Required if > *100L is stored.*
Signage	Required if > *100L is stored.*
Location test certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

USE: The substance shall only be used as a veterinary medicine.

NOTE: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

ACVM registration number: A007962
In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

16. OTHER INFORMATION

Abbreviations

Approval Code	Approval HSR100554, Controls, EPA. www.epa.govt.nz
ACVM	Agricultural Compounds and Veterinary Medicines
ARTG	Australian Register of Therapeutic Goods
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC_{50}	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
ERMA	Environmental Risk Management Authority (now EPA)
EPA	Environmental Protection Agency (previously known as ERMA)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD_{50}	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC_{50}	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS	Material Safety Data Sheet (or Safety Data Sheet)
OSH - DoL	The Occupational Safety and Health Service of the Department of Labour (NZ)
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) http://www.epa.govt.nz/hs/compliance/chemicals.html , for specific chemicals.
EPA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls Matrix	Part of the EPA New Zealand User Guide to the HSNO Control Regulations
WES 2011	The NZ Workplace Exposure Standards Effective from 2011, published by OSH – DoL and available on their web site – www.osh.dol.govt.nz.
Other References:	Suppliers MSDS

Review

Date	**Reason for review**
July 2012	Not applicable – new MSDS

Disclaimer

This MSDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The MSDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the MSDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, EPA Guidelines and international classifications. This MSDS is copyright Datachem and must not be edited without the permission of the copyright holder or used for other than intended purpose. To contact the MSDS author, email info@datachem.co.nz or phone: ***(09) 940 30 80.***