

MATERIAL SAFETY DATA SHEET

COMPANY DETAILS:

Western Stock Distributors

17 Rheola Street
West Perth WA 6005

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STATEMENT OF HAZARDOUS NATURE:

Hazardous according to the criteria of Worksafe Australia.

I IDENTIFICATION

Product Name : WSD ENDOMEK ABAMECTIN POUR ON FOR DAIRY AND BEEF CATTLE
UN No. : NA
Dangerous Goods Class : NA
Sub Risk Class : NA
Packaging Group : NA
Hazchem Code : NA
Poison Schedule : S5
Chemical Class : Abamectin is a Macrocyclic Lactone.
Formulation type : Solution
Product Use : Control of parasites in cattle; for use as described on the product label

Physical & Chemical Properties:

Physical Description & Colour : Clear yellow oily liquid
Odour : No data
Boiling Point : Not available
Freezing/ Melting Point : No specific data. Liquid at normal temperatures
Volatiles : No specific data. Expected to be low at 100°C
Vapour pressure : Negligible at normal ambient temperatures
Vapour Density : No data
Specific Gravity : 0.94-0.95 at 20°C
Water Solubility : Insoluble
Ph : No data
Volatility : Negligible at normal ambient temperatures
Odour Threshold : No data
Evaporation Rate : No data
Coeff Oil/ Water Distribution : No data
Viscosity : Ford # 4 cup; 15-25 sec at 20°C
Autoignition temp : No data

Ingredients:

Ingredients	CAS No	Conc,%w/v	TWA (mg/m ³)	STEL(mg/m ³)
Abamectin	71751-41-2	10g/L	Not Set	Not Set
Other Non Hazardous ingredients		to volume	Not Set	Not Set

There is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposure at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

II HAZARDS IDENTIFICATION

Statement of Hazardous Nature

This product is classified as: Hazardous according to the criteria of NOHS Australia.

Not a dangerous good according to the Australian Dangerous Goods (ADG) code.

Risk Phrases: R22, R51/53. Harmful if swallowed. Toxic to aquatic organisms may cause long-term adverse effects to the aquatic environment.

Safety Phrases: S20, S61, S24/25. When using, do not eat or drink. Avoid release to the environment. Refer to special instructions/ Safety Data Sheets. Avoid contact with skin and eyes.

SUSDP Classification: S5

ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.

UN Number: None allocated

Emergency Overview

Physical Description & Colour: Clear Liquid

Odour: No data

Major Health Hazards: Harmful if swallowed.

Potential Health Effects

Inhalation

Short Term Exposure: Significant inhalation exposure is considered to be unlikely. Available data indicates that this product is not harmful. In addition the product is unlikely to cause any discomfort or irritation.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin contact:

Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. In addition product is unlikely to cause any discomfort in normal use.

Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short Term Exposure: Exposure via eyes is considered to be unlikely. This product is believed to be not irritating to eyes.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, and is likely to cause headache and gastric disturbance such as nausea and vomiting if ingested in significant quantities.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

NOHSC: No significant ingredient is classified as carcinogenic by NOHSC.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

III FIRST AID MEASURES

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 11 26 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: No specific health data is available. If any unusual symptoms become evident, or if in doubt, wash skin with soap and water and contact a poisons information centre or a doctor.

Eye Contact: Quickly and gently blot material from eyes. First aid is generally not required. If in doubt, contact a poisons information centre or a doctor.

Ingestion: if swallowed, do NOT induce vomiting. Wash mouth with water and contact a poisons information centre, or call a doctor.

III FIRE FIGHTING MEASURES

Fire and Explosion Hazards: This product is classified as a C2 combustible product. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent Steam generation or eruption may occur upon application of direct water steam on hot liquids. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash Point: Not Flammable

Upper Flammability Limit: No data

Lower Flammability Limit: No data

Autoignition Temperature: No data

Flammability Class: C2

Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. If a significant quantity of this product enters watercourses, immediately advise local authorities, as this product is toxic to aquatic organisms. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mist are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Can be slippery on floors, especially when wet. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing run off from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal.

Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

IV HANDLING & STORAGE

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check section 8 of this MSDS for details of personal measures, and make sure that those measures are followed. The measures detailed below under "storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in section 10.

Storage: Note that this product is combustible and therefore, for storage, meets the definition of Dangerous Goods in some states. If you store large quantities (tonnes) of such products, we suggest that you consult your state's Dangerous Goods authority to clarify your obligations regarding their storage.

Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check-packaging- there may be further storage instructions on the label.

V EXPOSURE CONTROLS AND PERSONAL PROTECTION

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Industrial Clothing: AS2919, Industrial Eye Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210.

Exposure limits have not been established by NOHSC for any of the significant ingredients in this product. The ADI for Abamectin is set at 0.001mg/kg/day. The corresponding NOEL is set at 0.1mg/kg/day. ADI means acceptable daily intake and NOEL means No-observable-effect-level. Values taken from Australian ADI list, Dec 2004. No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mist are minimised.

Eye protection: Eye protection is not normally necessary when this product is being used. However, if in doubt wear suitable protective glasses or goggles.

Skin protection: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow- length) when skin contact is likely.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC.

Respirator: usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

VI STABILITY AND REACTIVITY

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities: Strong oxidising agents.

Fire Decomposition: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgement & unconsciousness followed by Coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

VII TOXICOLOGICAL INFORMATION

From plasma analyses in humans and in laboratory animals, after oral and/ or parenteral administration of Abamectin, the following half-lives have been calculated.

SPECIES	ROUTE	T _{1/2}
Human	Oral	10-12 Hours
Rat	I.V.	1 day
Cattle	Oral	2.7 days S.C. 2.9 days
Topical	15.9	days

Metabolism: Abamectin undergoes metabolism and is excreted mainly in the faeces. Abamectin is little metabolised by mammals; 90% of the administered dose is excreted mainly in the faeces and tissue residues are of the parent compound. Elimination by route of **Exposure:** Abamectin is excreted mainly in the faeces (unchanged), less than 1% appearing in the urine and less than 2% in breast milk. In animal studies, regardless of whether Abamectin is administered parenteral or orally, only 0.5% to 2% of the dose is excreted in urine; the remainder (about 90%) appears in the faeces.

VIII ECOLOGICAL INFORMATION

Abamectin: Very toxic to certain aquatic species.

LC50: Daphnia magna, 48 hours = 0.025 ppb; NOEL Daphnia magna = 0.01 ppb;

LC50: Rainbow trout, 96 hours = 3.0 ppb;

LC50: Bluegill Sunfish, 96 hours = 4.8ppb.

ENVIRONMENTAL FATE: (persistence, degradation, hydrolytic/photolytic stability etc): Abamectin photodegrades rapidly in the environment and is metabolised in the soil. Water solubility is limited and it binds to soil very tightly. It does not bioconcentrate in fish and is not taken up from soil to plants. Both aquatic and terrestrial studies confirm rapid degradation of Abamectin in the environment and lack of accumulation and persistence.

IX DISPOSAL CONDITIONS

Disposal: Instructions concerning the disposal of this product and it's containers are given on the product label. These should be carefully followed.

X TRANSPORT INFORMATION

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

XI REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are to be found in the public AICS database. The following ingredient: Abamectin, is mentioned in the SUSDP.

XII OTHER INFORMATION

Contact Points:

Police and Fire Brigade:

Dial 000

National Poisons Information Centre:

Dial 13 1126 (from anywhere in Australia)

SPECIALIST COMPANY ADVICE:-

Western Stock Distributors

17 Rheola St

West Perth WA 6005

Phone:- (08) 9321 2888

Fax :- (08) 9322 4163

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail

AICS Australian Inventory of Chemical Substances