APPLEMAX GOLD LIQUID BROAD SPECTRUM WORMER AND BOTICIDE FOR HORSES

Abbey Animal Health Pty Ltd
SAFETY DATA SHEET

Section 1- Identification of Product and Supplier

Supplier Company Details: Abbey Animal Health Pty Ltd

Address: 16 Voyager Circuit, Glendenning NSW 2761, Australia

Telephone Number: 02 8088 0720

Facsimile Number: 02 8088 0721

Emergency Number: Australian Poisons Information Centre: 13 11 26 (24 Hour service).

PRODUCT NAME
APPLEMAX GOLD LIQUID BROAD SPECTRUM WORMER AND BOTICIDE FOR HORSES

PRODUCT USE
For the treatment & control of tapeworms, large strongyles, small strongyles, hairworms, pinworms, roundworms (ascarids), intestinal threadworms, large mouthed stomach worms, bots, lungworms, summer sores and cutaneous onchocerciasis.

Section 2- Hazards Identification

Statement of Hazardous Nature
This product is classified as: Classified as hazardous according to the criteria of SWA.

SUSMP Classification: S5

ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria when transported by road or rail. Refer to Section 14.

GHS Signal word: Danger

GHS Classification:
Hazardous to aquatic environment Long term/ Chronic- Category 1
Toxic to Reproduction- Category 1B
Acute Toxicity Oral- Category 3

Pictogram:

HAZARD STATEMENT(S)
H301: Toxic if swallowed.
H410: Very toxic to aquatic organisms, may cause long term adverse effects in aquatic environment.
H360: May cause harm to unborn child.
H362: May cause harm to breastfed babies

PREVENTION
P260 + P270: Do not breathe dusts or mists. Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P281: Use personal protective equipment as required.

Response
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P308 + P313 IF exposed or concerned: Get medical advice/ attention

STORAGE
P410: Protect from sunlight.
P411: Store below 30°C (Room temperature).
P402+P404: Store in the closed container. Store in a dry and well-ventilated area.

DISPOSAL
P501: This material and its container must be disposed of as hazardous waste.

Section 3- Composition / Information on Ingredients

INGREDIENTS:

Chemical Name	CAS No.	Content (%)
Ivermectin	70288-86-7	1.0
Praziquantel	55268-74-1	7.5
No-hazardous Ingredients	Secret	to 100

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other nonhazardous ingredients are also present.

Section 4- First Aid Measures

Call Poisons Information Centre Phone Australia 131 126, if you feel that you may have been poisoned or irritated by this product.

Inhalation: Unlikely due to non-volatile nature of this product. Move affected person to fresh air. Seek medical attention if breathing difficulty occurs.

Skin: Remove contaminated clothing and wash affected areas thoroughly with soap and water.

Eye: Flush gently with large quantities of clean tap water for at least 15 minutes.

Ingestion: If poisoning occurs contact a doctor or the Poisons Information Centre. Phone 131126. Seek medical advice.

Advice to doctor: No specific antidote exists. If large amounts of ivermectin are consumed, neurological signs may develop. Give supportive and symptomatic therapy as required. Praziquantel is approved for human use in Australia under the tradename BILTRICIDE. Poisoning with this product is unlikely. Treat symptomatically.

Section 5- Fire Fighting Measures

Flammability: Non-flammable.
Extinguishing Media: Use water spray, foam, powder and carbon dioxide fire extinguishers appropriate to the surrounding area. Equipment should be thoroughly decontaminated after use.
Fire and Explosion Hazards: Keep away from extreme heat and open flames.
Hazardous Combustion Products: Fire decomposition products from this product may form toxic mixtures in confined spaces. This may include carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke, nitrogen and its compounds, and under some circumstances, oxides of nitrogen, and occasionally hydrogen cyanide gas. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both.
Fire Fighting: Wear self-contained breathing apparatus and protective suit.

Section 6 - Accidental Release Measures

Emergency Procedures: Contact emergency response personnel for large spills. Keep unnecessary persons away.

Method of Containment and Clean up Procedures: Absorb small spills using suitable absorbing material and place in a sealed container for disposal. In the event of a major spill, prevent the spillage

from entering drains or waterways. If safe to do so, stop the leak and contain the spill by absorbing onto inert material (sand, soil or other inert material). Collect and seal in properly labelled drums for disposal. After a spill, wash the area, preventing the runoff entering the drain. Wear overalls, eye protection and impervious gloves to prevent skin and eye contamination. Wash all contaminated clothing and equipment before re-use. Incinerate all spill material and residues at temperatures greater than 500ºC.

Section 7 - Handling and Storage

Handling: Avoid eye and skin contact. Wear protective clothing to minimize skin contact. Do not smoke, eat or drink while handling or using the product. Observe good personal hygiene by washing hands before and after use. Containers should always be kept closed in storage and stored in original labelled container. Avoid contact while pregnant or nursing. Do not allow children access to product or used containers.

Storage: Store below 30°C (Room temperature) in the closed, original container, in a dry, well-ventilated area. Protect from sunlight. Keep out of reach of children.

Section 8 - Exposure Controls / Personal Protection

National Exposure Standards: Exposure limits have not been established by SWA for this product. The ADI for Ivermectin is set at 0.001mg/kg/day. The corresponding NOEL is set at 0.1mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, September 2020.

***Personal Protective Equipment*:**
Eye Protection: Avoid contact with eyes. Eye protection such as protective glasses or goggles is not usually necessary under normal conditions of use. If there is risk of eye contact wear eye protection.

Skin Protection: Wear suitable gloves (preferably elbow-length) when skin contact is likely. Wash hands or other exposed areas after handling and use.

Respirator: No special respiratory protection equipment is recommended under normal conditions of use with sufficient ventilation.

Thermal protection: Non-flammable product. No special protective equipment is recommended.

Section 9 - Physical and Chemical Properties

Physical state	Liquid
Colour	Colourless to slightly pink

pH	Not available
Boiling point	Not available
Flash point	Not available
Solubility	Slightly soluble in water

Section 10 - Stability and Reactivity

Chemical stability: Stable under normal ambient and anticipated storage conditions of temperature and pressure
Conditions to Avoid: Keep away from extreme heat and open flames.
Incompatibilities: Strong acids and strong oxidising agents
Possibility of hazardous reactions: Not applicable
Hazardous decomposition products: Fire decomposition products from this product may form toxic mixtures in confined spaces.

Section 11 - Toxicological Information

No adverse health effects are expected, if the product is handled in accordance with this Safety Data Sheet and the product label
Reproductive Effects: Ivermectin may cause harm to the unborn child and to breastfed babies. Avoid contact while pregnant or nursing. Use personal protective equipment as required. Praziquantel has not been shown to produce reproductive or teratogenic effects.
Mutagenicity: None of the ingredients of the formulation have been shown to produce mutagenic effects.
Carcinogenic Effects: Ivermectin has been shown in animal tests to have no carcinogenic potential. No ingredients are not listed as a probable human carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995)

Health Hazard Information:
ACUTE:
Ivermectin:

Rat	Oral	LD50	50mg/kg
Rattling	Oral	LD50	2-3mg/kg
Rat	Intraperitoneal	LD50	55mg/kg
Rat	Dermal	LD50	>660mg/kg
Mouse	Oral	LD50	25mg/kg
Mouse	Intraperitoneal	LD50	30mg/kg
Rabbit	Dermal	LD50	406mg/kg
Dog	Oral	LD50	80mg/kg
Monkey	Oral	LD50	>24mg/kg

Praziquantel:

Rat	Oral	LD50	>2840mg/kg
Rat	Dermal	LD50	>2000mg/kg

Symptoms that may arise if the product is mishandled are:

Swallowed: Ivermectin is considered highly toxic in acute animal studies. Animal experiments indicate that ingestion of less than 40g may be fatal or may produce serious damage to the health of the individual. If large amounts are consumed, neurological signs may develop, including, ataxia (incoordination), lethargy, bradypnea (slowed breathing), vomiting, mydriasis (dilated pupils), sedation, tremors and death in animals. In humans, no toxic effects have been noted at doses up to 200µg/kg.

Eye: Under normal conditions of use, no eye contact is expected. Direct contact of the solution with the eyes can cause irritation, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Skin: Under normal conditions of use, no skin contact is expected. Contact with skin may result in irritation.
Inhalation: This product is not expected to cause respiratory irritation due to non-volatile nature of the product. The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (in animal models).

CHRONIC
Unknown in humans for this formulation. Chronic exposure to ivermectin in other species can cause harmful and toxic effects.
Eye: Prolonged contact may cause inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Skin: May cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

METABOLISM
Ivermectin undergoes metabolism and is excreted mainly in the faeces. Ivermectin is little metabolised by mammals; 90% of the administered dose is excreted in the faeces and tissue residues are of the parent.

ELIMINATION BY ROUTE OF EXPOSURE
Ivermectin 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 Ivermectin is administered parenterally or orally, only 0.5 to 2% of the dose is excreted n urine; the remainder (about 90%) appears in the faeces.

Section 12 - Ecological Information

Ecotoxicity: Ivermectin is highly toxic to fish and bees and extremely toxic to aquatic invertebrates. Ivermectin is non-toxic to birds. Do not contaminate dams, rivers or streams with the product or used containers. Handle in a manner to prevent spills or releases to the environment.

Daphnia magna	LC50 48 hours = 0.025 ppb;	NOEL = 0.01 ppb;
Rainbow trout	LC50 96 hours = 3.0 ppb;	
Bluegill sunfish	LC50 96 hours = 4.8 ppb.	

Persistence:
When ivermectin comes in contact with soil, it readily and tightly binds to the soil and becomes inactive over time. At the soil surface, it is subject to rapid photodegradation, with a half-life of 1 day or less reported. Under dark, cool, conditions, the soil half-life can be extended up 12 months. Loss of ivermectin from soils is thought to be due to microbial degradation. The rate of degradation was significantly decreased under cold and/or anaerobic conditions.
Ivermectin is rapidly degraded in water. It undergoes rapid photodegradation, with a half-life of <2 days when in clear water and bright sunlight. Plants do not absorb ivermectin from the soil. Ivermectin is subject to rapid degradation when present as a thin film, as on treated leaf surfaces. Under laboratory conditions and in the presence of light, its half-life as a film was <12 hours.
As ivermectin undergoes rapid degradation in light and soil, and binds tightly to soil and sediment, it will not accumulate or translocate. These properties minimise environmental impact on non-target organisms.

Section 13 - Disposal Considerations

Spills and Disposal: Shake and empty contents into medicated water. Do not dispose of undiluted chemicals on site. Puncture or shred and bury empty containers in a local authority landfill. If not available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Product should not be burnt.

Section 14 - Transport Information

No specific transport considerations apply since *APPLEMAX GOLD LIQUID BROAD SPECTRUM WORMER AND BOTICIDE FOR HORSES* is NOT classified as a dangerous good according to Australian Dangerous Goods (ADG) Code.

CLASSIFIED AS DANGEROUS GOODS when transported by sea or air.

UN NO.: 3082
UN proper shipping name: Environmentally Hazardous Substance, Liquid, NOS (Ivermectin)
Class & Subsidiary Risk: 9
Packaging Group: III
Hazchem Code: 3Z
Marine Pollutant: yes

Section 15 - Regulatory Information

Poisons Schedule: S5

APVMA Approval Number: *85317*

Approved pack size: *50mL, 100mL,120mL, 250mL, 1L*

For more information please refer to the APVMA approved product label

Section 16 – Other Information

Abbey Animal Health Pty Ltd
Telephone Number: 02 8088 0720
Facsimile Number: 02 8088 0721

Emergency Number: Australian Poisons Information Centre: 13 11 26 (24 Hour service).

This Safety Data Sheet (SDS) summarizes our best knowledge of the health and safety hazard information of the product according to the GHS requirements and how to safely handle and use the product in the workplace.

Each user must review this SDS in the context of how the product will be handled and used in the workplace.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

***Note: This SDS is valid for 5 years from the effective date.**