

SAFETY DATA SHEET

Product Name: ALBENDAZOLE Sheep Hi Mineral

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Reviewed on: 4th September 2008

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product name:	ALBENDAZOLE Sheep Hi Mineral
Product code:	A6521
Recommended use:	For the control of albendazole sensitive roundworms, tapeworms, lungworms and adult fluke in sheep. Contains selenium, copper and cobalt.
Company details:	Merial New Zealand Ltd
Address:	Level 3, Merial Building Osterley Way Manukau City New Zealand
Telephone number:	Phone: +64 9 980 1600 Fax: +64 9 980 1601
Emergency telephone number:	Merial Ancare Freephone: 0800 800 822 National Poisons Centre: 0800 764 766 (0800 POISON) Fire Service, Ambulance: Dial 111
Date of preparation:	28 March 2006

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization:	Liquid		
Product components:			
Name	CAS	Proportion	
Albendazole	54965-21-8	23.8 g/L	
Copper sulphate pentahydrate	7758-99-8	8.3 g/L (2.1 g/L copper)	
Cobalt		0.25 g/L cobalt	
Sodium selenate	13410-01-0	1.2 g/L (0.5 g/L selenium)	
Other		to 1L	

SECTION 3: HAZARDS IDENTIFICATION

Hazard classifications:	6.3B, 6.5B, 6.6B, 6.8A, 6.9B, 9.1A, 9.2C
Priority and secondary identifiers:	WARNING Dangerous to the environment
Risk and safety phrases:	6.3B May cause mild skin irritation. Avoid skin contact. 6.5B Repeated exposure may cause skin allergy. Avoid skin contact. 6.6B Albendazole possibly may cause damage to genetic material. Handle with care. 6.8A Albendazole may affect development and/or reproduction. Handle with care. 6.9B Albendazole possibly may cause organ damage from repeated oral exposure at high doses. Handle with care. 9.1A Very toxic to aquatic organisms. Avoid contamination of any water supply with product or empty container. 9.2C Harmful to the soil environment. Avoid release to the environment.

SECTION 4: FIRST AID MEASURES

Necessary first aid measures:	For advice contact the National Poisons Centre on 0800 POISON (0800 764 766), or a doctor immediately. <u>Ingestion:</u> If swallowed seek medical attention. Do NOT induce vomiting.
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Workplace facilities:	<u>Eye Contact:</u> If splashed in eyes wash out immediately with water.
Required instructions:	<u>Skin Contact:</u> If skin or hair contact occurs remove contaminated clothing and flush skin and hair with running water.
Notes for medical personnel:	<u>Inhalation:</u> Remove to fresh air. No special facilities required. Observe good work practices and avoid skin 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. Apply symptomatic therapy. Note the nature of the product (possible mutagen, reproductive/developmental toxin)

SECTION 5: FIRE FIGHTING MEASURES

Type of hazard:	Non flammable, Non combustible, Non explosive
Fire hazard properties:	Albendazole Sheep is not classified as flammable, and will not support combustion. Hazardous fumes when heated to decomposition.
Regulatory requirements:	N/A
Extinguishing media and methods:	Treat the fire as for the other materials present. Do not allow water to enter drains.
Hazchem code:	2X
Recommended protective clothing:	When fighting a major fire wear full protective clothing including breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency procedures:	Wear suitable protective clothing. Restrict access to contaminated area. Contain the spill and prevent further dispersion. Retrieve intact containers from site. Place damaged containers into containment devices. Absorb spills with inert material and place in waste containers. Wash the area with water and absorb with further inert material. Collect spilled material and place in sealable containers for subsequent disposal. Avoid contamination of water courses or sewers. Dispose of waste safely
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SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Apply with well-maintained and calibrated equipment. Handle with care.
Regulatory requirements:	N/A
Handling practices:	N/A
Approved handlers:	Not required
Conditions for safe storage:	Store in a cool place with lid on. Keep out of reach of children.
Store site requirements:	This substance is subject to a requirement for an 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.
Packaging:	Packaging Schedule 3 for quantities >1L (Hazardous Substances Packaging Regulations 2001). UN Packing Group III.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Workplace exposure standards:	Selenium compounds, as Se TWA 0.1mg/m ³ Copper fume TWA 0.2mg/m ³ Copper dusts & mists, as Cu TWA 1mg/m ³ Cobalt metal dust and fume, as Co TWA 0.05mg/m ³
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Application in the workplace:	Dusts 10mg/m ³ Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent skin contact.
Exposure standards outside the workplace:	EEL: Copper (Cu2+) 0.0013mg/L water
Engineering controls:	Ensure that ventilation maintains dust levels below WES,
Personal protection:	Clothing should consist of overalls with long sleeves and impervious gloves.
References:	N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specify product data:	<u>Formulation type:</u> Suspension <u>Appearance:</u> Blue suspension <u>Specific gravity:</u> ~1.0 g/ mL <u>Boiling Point:</u> ca. 100° C <u>Vapour Pressure:</u> NA <u>Solubility in Water:</u> Insoluble, formulated as suspension
Required specifications:	N/A
Further specifications:	N/A
Specific advice:	N/A

SECTION 10: STABILITY AND REACTIVITY

Stability of the substance:	Stable under normal conditions of use and storage.
Conditions to avoid:	No specific conditions to avoid.
Material to avoid:	No specific materials to avoid.
Hazardous decomposition products:	No hazardous products are expected, except when heated to decomposition.
Hazardous polymerization:	Components are not expected to form hazardous polymers.
Specific data:	N/A

SECTION 11: TOXICOLOGICAL INFORMATION

Data and interpretation:	<u>Albendazole Sheep:</u> May cause mild skin irritation. Repeated exposure may cause skin allergy. Danger of serious damage to health by prolonged exposure if swallowed. Albendazole possibly may cause damage to genetic material. Albendazole may affect development and/or reproduction. Albendazole possibly may cause organ damage from repeated oral exposure at high doses.
Summaries data:	<u>Albendazole:</u> Benzimidazoles prevent tubulin polymerisation or spindle movement and their administration can result in aneuploidy. They are weak mutagens. Albendazole has low to moderate acute oral toxicity [LD ₅₀ (oral, rabbit) 500-1250mg/kg; LD ₅₀ (oral, rat) 1320-2400mg/kg; LD ₅₀ (oral, mice) >3000mg/kg]. Identified as a potential skin sensitiser by a positive result in a guinea pig maximisation test. In repeated dose studies toxic effects included reduced weight gain, reduced erythrocyte and leucocyte counts, decreased testes and uterine weights, slight increases in relative liver and kidney weights, and sternal bone marrow hypocellularity (lowest NOAEL 5mg/kg/day). Teratogenicity (visceral, craniofacial and bone defects) has been demonstrated in animal studies (lowest NOEL was 5mg/kg/day). <u>Copper sulphate:</u> Copper sulphate is a mild skin sensitiser. It is irritating to eyes, skin and the respiratory tract. Not likely to be toxic at levels used in drenches [LD ₅₀ (oral, rat) 960mg/kg]. Repeated oral dose studies identified nephrotoxicity (NOAEL 25mg/kg) as a critical early target organ effect.

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Sodium selenate: Sodium selenate is acutely toxic [LD₅₀ (oral) 25mg/kg]. Dusts are toxic if inhaled and irritant to eyes. Acute poisoning exhibits as dyspnea, spasms and death from respiratory failure. Selenium poisoning in humans has been described and gastrointestinal and neurological symptoms predominated. Potential mutagen. Repeated oral dose testing in laboratory species identified a lowest NOAEL of 0.37mg/kg/day (liver toxicity).

SECTION 12: ENVIRONMENTAL INFORMATION

Potential environmental interactions:

Very toxic to aquatic life and hazardous to the soil environment.

Data organisation :

Albendazole: Albendazole may be toxic to terrestrial vertebrates based on LD₅₀ data [LD₅₀ (oral, rabbit) 500-1250mg/kg]. Not toxic to fish or honey bees. The potential for bioaccumulation is low and benzimidazoles are degraded in soil and probably also in water.

Copper sulphate: Very toxic to aquatic organisms [LC₅₀ (96hr, Rainbow trout) 0.032mg/L; EC₅₀ (48hr, *Daphnia magna*) 0.18mg/L]. Not readily biodegradable, copper persists. Toxic to terrestrial vertebrates based on an acute oral LD₅₀ (rat) of 960mg/kg.

Sodium selenate: Very toxic to fish [LC₅₀ (96hr, Flathead minnow) 690ug/L], to crustacean [LC₅₀ (48hr, *Grammarus pseudolimnaeus*) 83ug/L] and algae [EC₅₀ (96hr, green algae) 0.2mg/L]. Toxic to plants [EC₂₀ (22d) 0.1mg/kg soil]. Toxic to terrestrial vertebrates based on an acute oral LD₅₀(rats) of 25 mg/kg. Selenium is bioaccumulative and persists.

Environmental risk and safety phrases:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Selenium 0.05%)

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal information :

Preferably dispose of the product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility. Burn empty container in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill. Do NOT use container for any other purpose.

SECTION 14: TRANSPORT INFORMATION

Relevant information:

Dangerous Goods for transport.
UN Number: 3082
Dangerous Goods Class: 9

Other requirements:

The maximum quantity per package of this substance allowed for carriage on public transport is 1L.
N/A

SECTION 15: REGULATORY INFORMATION

Regulatory status:

Registered pursuant to the ACVM Act 1997, No. A6521
See www.nzfsa.govt.nz/acvm for registration conditions

Approved pursuant to the HSNO Act, Approval Code HSR001955
See www.ermanz.govt.nz for approval conditions

HSNO and ACVM controls:

SDS is required for quantities greater than or equal to 0.1L
Refer to Section 3

List exposure limits:

N/A

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SECTION 16: OTHER INFORMATION

Additional information:

For product information visit the Merial website www.merial.co.nz

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