

# MATERIAL SAFETY DATA SHEET



## **CENTAGARD for 40-80kg sheep. A Controlled Release Worm Control Capsule with Selenium & Cobalt for Adult Sheep**

Issue Date: 21 May 2009

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### **SECTION 1**

### **IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product description: Oral capsule for **adult** sheep containing albendazole, selenium & cobalt.  
Recommended use: For use in sheep for 100 days continuous protection against benzimidazole-susceptible internal parasites, selenium deficiency & cobalt deficiency.

Supplier name: Ancare Australia Pty Ltd  
Address: Level 6, 79 George Street  
Parramatta NSW 2150  
Telephone number (toll-free): 1800 001 973  
All hours emergency phone number - Poisons Information Centre 131126 anywhere in Australia

### **SECTION 2**

### **HAZARDS IDENTIFICATION**

**Classified as hazardous** according to the National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)].

APPROVED CRITERIA:CLASSIFICATION: HARMFUL Xn

**Not classified as Dangerous Goods according to the ADG Code.**

Risk phrase(s) (Hazard): HARMFUL IF SWALLOWED (R22)  
MAY CAUSE SENSITISATION BY INHALATION OR SKIN CONTACT (R42/43)  
MAY CAUSE BIRTH DEFECTS (R47)  
MAY CAUSE CANCER BY INHALATION (R49)  
MAY CAUSE HARM TO THE UNBORN CHILD (R61)

Safety phrase(s):  
(Precautionary statements) KEEP OUT OF THE REACH OF CHILDREN (S2)  
KEEP AWAY FROM FOOD AND DRINK (S13)  
DO NOT EMPTY INTO DRAINS (S29)  
IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THE CONTAINER OR LABEL (S46)

SUSDP CLASSIFICATION - Schedule 6  
ADG CODE CLASSIFICATION: Not classified  
UN No. None

#### **LOCAL EFFECTS OF PRODUCT:**

##### **Acute:**

SWALLOWED: Not a likely route of exposure. Although very unlikely to occur, care is needed to prevent ingestion by a child. May cause liver damage, headache, allergic reaction, bone marrow depression, gastrointestinal tract irritation or alopecia (loss of hair).

INHALATION: Not a likely route of exposure (tablets enclosed in a polypropylene capsule).

SKIN CONTACT: Not a likely route of exposure (tablets enclosed in a polypropylene capsule).

EYE CONTACT: If a capsule is broken, dust may irritate eyes. Avoid contact with eyes.  
Under normal conditions of use, no eye contact is expected

CHRONIC EFFECTS: The following WHO information relates to 100% albendazole: Albendazole is a reproductive toxin. Teratogenicity has been noted in the rat and embryotoxicity in the rabbit. Dogs dosed for 6 months showed neutropenia, anaemia and decreased testicular, body and uterine weights. Based on a number of studies in rats, rabbits and dogs, the NOEL is reported to be 5 mg/kg/day.

CARCINOGEN STATUS: Cobalt sulphate classified by ASCC as a carcinogen Category 2.



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## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient inside capsule	CAS No.	Content %	Classification	Risk phrase
Albendazole *	54965-21-8	30% - 60%	Toxic T Rep. Cat. 2	R 22 / R 47 / R 61
Sodium selenate	13410-01-0	0.460	Toxic T	R23 / 25 / 33
Cobalt sulphate anhy.	10124-43-3	4.475	Toxic T Carc. Cat.2	R 22 / 42 / 43 / 49
Other ingredients not contributing to hazardous characteristics	various	to 100 %	Not classified	-

\*methyl [5-(propylthio)-1H-benzimidazol-2-yl]carbamic acid methyl ester

## SECTION 4 FIRST AID MEASURES

ADVICE:	For advice, contact a Poisons Information Centre (Phone 131126 anywhere in Australia), or call a doctor at once.
INGESTION:	If a capsule is swallowed urgent hospital treatment is likely to be needed. Follow instruction of Poisons Information Centre. Medical conditions aggravated by exposure - none known.
INHALATION:	Not an expected route of exposure given the capsule form.
SKIN CONTACT:	No effects on skin expected from handling intact capsules. Wash hands after use.
EYE CONTACT:	If in eyes, hold eyelids apart and flush the eye continuously with running water until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

## SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS:	Not flammable or combustible. Polypropylene capsule would represent fuel in a fire.
EXTINGUISHING MEDIA:	Water spray/fog, dry chemical, CO2 or foam.
FIRE FIGHTING:	
Special advice in case of fire:	Emergency workers should wear full protective equipment and supplied-air breathing apparatus. Toxic or irritant gases, vapours or particulates may be generated in a fire. Contain contaminated fire-fighting water.
Hazardous products of combustion:	Oxides of carbon and nitrogen, compounds of selenium and cobalt, formaldehyde, acrolein and various other organic substances.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Initial Emergency response Guide: None

If spill is of significant quantity and capsules are broken, move non-essential persons away. Pregnant females should not be exposed to dust. Wear protective equipment shown in Section 8. Remove leaking packages and place in over-bin. Do not allow to enter drains or sewer. Sweep up and pack in properly labelled container for disposal. Consult waste authority regarding disposal and provide detailed composition.

OCCUPATIONAL RELEASE: As for accidental release. Wear impervious gloves and eye protection to deal with a large spill.

## SECTION 7 HANDLING AND STORAGE

Harmful if swallowed. If capsules are broken, the dust is likely to irritate the eyes. Avoid contact with eyes. Wash hands after use. Keep away from foodstuffs and beverages. Do not eat, drink or smoke when using the product.

Not classified as Dangerous Goods. Do not store with food. Store in original container below 30°C (Room Temperature). Do not freeze. Protect from light.

Ventilation: No special requirements  
Sources of ignition: No special requirements.



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## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

No ingredients that require workplace atmosphere monitoring have been identified by the manufacturer  
NOHSC TWA = 0.1 mg/cu.m for sodium selenate.

NOHSC STEL= not established

The supplier's Internal Permissible Exposure Limit has been established at 0.3 mg/cu.m for the active ingredient, albendazole.

Exposure Controls / Industrial hygiene: Not required.

Avoid contact with eyes. Wear eye protection if there is likelihood of particles entering the eye.

Personal Protective Equipment for cleaning up a significant spill where capsules have been broken.

EYE PROTECTION: Goggles complying with AS 1337/1337.

SKIN PROTECTION: Wear impervious gloves such as PVC coated cotton gloves complying with AS/NZS 2161.2.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Translucent plastic capsule containing pale pink tablets.
Odour.	None
pH.	Not applicable
Boiling point/range.	Not applicable
Freezing Point	Not applicable
Melting point	Not applicable
Solubility in water	Not available
Specific gravity or density.	Not applicable
Flash point	Not applicable
Reactivity	Not an oxidising agent.
Incompatible materials.	None identified.

## SECTION 10 STABILITY & REACTIVITY

Thermal decomposition: None at normal temperatures.

Dangerous reactions: None known.

REACTIVITY: Stable.

CONDITIONS TO AVOID: Exposure to oxidising agents, elevated temperatures and light.

HAZARDOUS DECOMPOSITION: No significant decomposition expected at normal temperatures.

POLYMERISATION: No hazardous polymerisation will occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

Does not contain heavy metals or halogenated compounds. Health effects from the likely routes of exposure:

For ingredient **albendazole** Oral LD50: 1500 mg/kg (mouse) / 2400 mg/kg (rat)

For **sodium selenate** Oral LD50: 7 mg/kg (rat)

For **cobalt sulfate** Oral LD50: 424 mg/kg (rat)

LOCAL EFFECTS OF PRODUCT:

Skin: No irritating effect known.

Eye: Powder from tablets may be irritating.

Sensitization: Exposure to the tablets themselves, may have sensitizing effects by inhalation of dust or skin contact (cobalt ingredient).

TARGET ORGANS: Reproductive systems, bone marrow.

HAZARDOUS INGREDIENTS: **Albendazole** R-Phrase 22 / 47 / 61

HARMFUL IF SWALLOWED

MAY CAUSE BIRTH DEFECTS

MAY CAUSE HARM TO THE UNBORN CHILD

In a two-year study in rats, doses of 20mg/kg/day produced mortality, neutropenia, hypercholesterolemia, testicular degeneration and hepatic fatty metamorphosis. Resulting NOEL = 7 mg/kg/day.

Elevated alkaline phosphatase was observed in dogs at 10 mg/kg/day.



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MUTAGENICITY DATA:	<b>Albendazole</b> did not produce bacterial mutations, chromosomal aberrations or morphological transformations in cultured mammalian cells; no clastogenicity in an <i>in vitro</i> metaphase analysis of Chinese hamster ovary cells; negative in an <i>in vitro</i> cell transformation assay in BALB/3T3 mouse cells. Albendazole is indicated as an <i>in vivo</i> somatic cell mutagen/ <i>in vivo</i> aneugen. A no-mutageneic-risk level of exposure to humans has not yet been identified.
CARCINOGENICITY:	Albendazole bioassays showed no evidence of neoplasia in either rats or mice.
REPRODUCTIVE EFFECTS:	ASCC classification: Reproductive toxicant Category 2. Albendazole was shown to be teratogenic in rats and rabbits at doses of 10 mg/kg/day in the first half of pregnancy. Male rats showed testicular hyperplasia at 10 mg/kg/day. Reference European Medicines Agency (EMA/MRL/865/03-final June 2004)
HAZARDOUS INGREDIENTS:	<b>Cobalt sulfate</b> R-Phrases 22/42/43/49 HARMFUL IF SWALLOWED MAY CAUSE SENSITISATION BY INHALATION OR BY SKIN CONTACT MAY CAUSE CANCER BY INHALATION
CARCINOGENICITY:	Classified as Carcinogen Category 2 by ASCC
HAZARDOUS INGREDIENTS:	<b>Sodium selenate</b> R-Phrases 23/25/33 TOXIC BY INHALATION OR IF SWALLOWED DANGER OF CUMULATIVE EFFECTS
CARCINOGENICITY:	Not classified as Carcinogen by ASCC.

## SECTION 12 ECOLOGICAL INFORMATION

Information applies to **albendazole** active ingredient.

Microtox test result:	Albendazole was found toxic to a sensitive marine photo-bacteria
Biological elimination:	Not available
BIOACCUMULATION:	Albendazole does not tend to bioaccumulate.
TOXICITY TO FISH:	Not available
TOXICITY TO DAPHNIA	<i>Daphnia magna</i> , Static test NOEL: 0.017 mg/L, 48 Hours, active ingredient that is toxic to daphnids.
TOXICITY TO ALGA:	No toxicity to algae observed, but the upper range of the test was limited by the low water solubility of the compound.
TOXICITY TO BACTERIA:	No toxicity to sludge microorganisms was observed for the active ingredient, but the upper range of the test was limited by the low water solubility of the compound.
EARTHWORM:	Not toxic to earthworms.
READY BIODEGRADABILITY:	Not available
PARTITIONING:	Octanol/water partition coefficient data suggests that active ingredient will not accumulate in lipids.
ADSORPTION:	Active ingredient that is likely to adsorb to soil or sediment.
PHOTOLYSIS:	<b>Albendazole</b> has been shown to be chemically unstable in water when exposed to light. Aqueous photolysis may be a significant depletion mechanism. Half-Life, Aqueous: 0.1 to 1.65 Days.

Information applies to **cobalt sulfate** active ingredient.

TOXICITY TO FISH:	LC50 96 hr Rainbow trout 1.4 mg/L
TOXICITY TO DAPHNIA	LC50 96hr <i>Daphnia magna</i> 1.5 mg/L. NOEL 28 day: 0.03 – 0.05 mg/L
TOXICITY TO ALGA:	LC50 fresh water algae 0.6 – 56 mg/L.



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## SECTION 13 DISPOSAL CONSIDERATIONS

As the active ingredients are toxic to aquatic organisms, care is required to ensure that the product does not reach drains, waterways or unpaved soil.

Empty packaging may be disposed of by wrapping in paper and placing in garbage. For the disposal of the clean-up materials from a **significant spill**, consult the waste authority.

## SECTION 14 TRANSPORT INFORMATION

UN Number	None
UN Proper Shipping Name	None
Class and subsidiary risk	None
Packing Group	None
Special precautions for user	
Labelling:	None

## SECTION 15 REGULATORY INFORMATION

**CENTAGARD for 40-80kg sheep. A Controlled Release Worm Control Capsule with Selenium & Cobalt for Adult Sheep** is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA Approval Number: 63558

## SECTION 16 OTHER INFORMATION

Although very unlikely to occur, care is needed to prevent ingestion of a capsule by a child.

### ACRONYMS USED IN THIS MSDS

SUSDP	Standard for the Uniform scheduling of Drugs and Poisons
ADG Code	Australian Dangerous Goods (ADG) Code
CAS No.	Chemical Abstracts number
UN No.	United Nations identifying number for DG
R-phrases	Risk phrases identifying main hazard of ingredient or product
S-phrases	Safety phrases identifying main safety measures to be used
ASCC	Australian Safety and Compensation Council
NOHSC	National Occupational Health and Safety Commission
NTP	National Toxicology Programme (USA)
IARC	International Agency for Research on Cancer

**SUPPLIER STATEMENT:** *The product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations.. The information in this MSDS is based on the level of knowledge at the time of preparation and relates to the product in the state in which it is supplied. The information describes the product from the safety point of view and is not intended to guarantee any particular properties .and shall not establish a legally valid contractual relationship*