MATERIAL SAFETY DATA SHEET



HEARTGARD 30 Plus Chewables for Dogs

Version 4

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SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product description: Blue pack: beef chewables for dogs up to 11kg:

68µg ivermectin/57 mg pyrantel embonate per chewable

beef chewables for dogs 12 to 22kg: Green pack:

136µg ivermectin/114 mg pyrantel embonate per chewable

beef chewables for dogs 23 to 45kg: Brown pack:

272µg ivermectin/227 mg pyrantel embonate per chewable

For use in dogs for heartworm prevention and monthly treatment and control Recommended use:

> of roundworms and hookworms. Prevents heartworm disease by eliminating heartworm larvae that infected the dog in the month before treatment and controls heartworm infections acquired in the previous 4 months if monthly treatment is continued for at least 12 months.

Supplier name: Merial Australia Pty Ltd

Address: Building D, 12-24 Talavera Road

Macquarie Park NSW 2113

1800 808 691 Telephone number (toll-free):

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)

KEEP OUT OF THE REACH OF CHILDREN (S2) Safety phrase(s)): KEEP AWAY FROM FOOD AND DRINK (S13) (Precautionary statements)

DO NOT EMPTY INTO DRAINS (\$29)

IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW

THE CONTAINER OR LABEL (S46)

SUSDP CLASSIFICATION -POISONS SCHEDULE: 5

ADG CODE CLASSIFICATION: Not classified

UN No. None

LOCAL EFFECTS OF PRODUCT:

Acute:

SWALLOWED: Poisonous if swallowed. Symptoms following over-exposure to the

ivermectin ingredient may include: drowsiness, nausea, vomiting,

tachycardia, somnolence, blood pressure variations, slow breathing, dilation

of pupils, tremors, and incoordination. In humans, no toxic effects of

ivermectin have been reported for oral doses up to 2000 µg/kg bodyweight.

Ivermectin can be excreted in milk.

INHALATION: Not a likely route of exposure for this formulation.

SKIN CONTACT: Not expected to cause irritation.

Will irritate eyes. Avoid contact with eyes. Under normal conditions of use, **EYE CONTACT:**

no eye contact is expected



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CHRONIC EFFECTS: Unknown for product mixture. Pure ivermectin is a reproductive toxin in

mice and rats only at doses that cause toxicity to the mother; however, in rabbits foetotoxicity and teratogenicity were noted at doses not toxic to the mother. Rats exposed *in utero* through lactation, and for an additional three

months, showed signs indicative of intravascular haemolysis.

CARCINOGEN STATUS: Not classified by NOHSC, NTP or IARC

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient CAS No. Content Classification Cut-off conc. % Risk phrase

Pyrantel 15686-83-6 3 to 8% Toxic T - R 25

Solvent Confidential 4% - - -

Ivermectin 70288-86-7 <1% Toxic T 0.1 R20/21/25/50

Not contributing to

hazardous characteristics various to 100 % Not classified -

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 swallowed urgent hospital treatment is likely to be needed. Follow instruction of

Poisons Information Centre. Medical observation for delayed symptoms needs to

be carried out for up to 48 hours.

Medical conditions aggravated by exposure - none known.

Treatment is symptomatic.

INHALATION: Not an expected route of exposure given the physical form.

SKIN CONTACT: No effects on skin expected. 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.

PHARMACOLOGY: Ivermectin is believed to bind to glutamate-gated chloride ion channels in patients

with potentially toxic ivermectin exposure avoid drugs that also interact with other

ligand-gated chloride channels, including those that enhance GABA activity

(barbiturates, benzodiazepines, valproic acid).

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Not flammable or combustible.

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. Spray water on containers

to cool. Contain contaminated fire-fighting water.

Hazardous products of combustion: Oxides of carbon and nitrogen, various organic substances.



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SECTION 6 ACCIDENTAL RELEASE MEASURES

Initial Emergency response Guide: None

If spill is of significant quantity, move non-essential persons away. Seal leak. 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.

OCCUPATIONAL RELEASE: As for accidental release. Wear impervious gloves and eye protection to

deal with a large spill.

SECTION 7 HANDLING AND STORAGE

Poisonous if swallowed. Will 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.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

No ingredients that require workplace atmosphere monitoring have been identified by the manufacturer

NOHSC TWA = not established NOHSC STEL= not established

No exposure limits have been established for more toxic ingredients such as the active ingredients.

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. EYE PROTECTION: Goggles complying with AS 1336/1337.

SKIN PROTECTION: If required, wear impervious gloves such as PVC coated cotton gloves complying

with AS/NZS 2161.2.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance Brown solid cube.

Odour. Meatv

pH. Not applicable
Boiling point/range. Not applicable
Freezing Point Not applicable
Melting point Not applicable
Solubility in water Insoluble
Specific gravity or density. Not applicable
Flash point Not applicable

Reactivity Not an oxidising agent.

Incompatible materials. None identified.



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SECTION 10 STABILITY & REACTIVITY

Thermal decomposition: None at normal temperatures.

Dangerous reactions: None known. REACTIVITY: Stable.

CONDITIONS TO AVOID: Exposure to 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 **ivermectin**

Oral: LD50: 37 mg/kg (mouse) LD50: 50 mg/kg (rat) Dermal: LD50: 406 mg/kg (rabbit) LD50: >660 mg/kg (rat)

Inhalation: LC50/4h: 5.11 mg/L (rat)

LOCAL EFFECTS OF PRODUCT:

Skin: No irritating effect known.

Eye: Slightly irritating.

Sensitization: No sensitizing effects known.

TARGET ORGANS: Eyes.

HAZARDOUS INGREDIENTS: Ivermectin and pyrantel R-Phrase 25

TOXIC IF SWALLOWED

MUTAGENICITY DATA: Not available

SECTION 12 ECOLOGICAL INFORMATION

Information applies to **Ivermectin** active ingredient.

Biological elimination:

Not available
Bioaccumulation potential:

Not available

TOXICITY TO FISH: LC50 Rainbow Trout 96 hr 0.3 µg/L - poisonous.

TOXICITY TO DAPHNIA: EC50 48 hr (*D. magna*) 0.025 µg/L

TOXICITY TO ALGA:

TOXICITY TO BACTERIA:

READY BIODEGRADABILITY:

Not available

Not available

For the product itself: Not known to be hazardous to water.

SECTION 13 DISPOSAL CONSIDERATIONS

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

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 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



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SECTION 15 REGULATORY INFORMATION

HEARTGARD³⁰ Plus Chewables are registered with the Australian Pesticides and Veterinary Medicines Authority.

APVMA Approval Numbers: 39541

39540 39539

SECTION 16 OTHER INFORMATION

ACRONYMS USED IN THIS MSDS

SUSDP Standard for the Uniform scheduling of Drugs and Poisons

ADG Code Australian Dangerous Goods (DG) Code

CAS No. Chemical Abstracts number

UN No. United Nations identifying number for DG

R-phrases
S-phrases
NOHSC
Risk phrases identifying main hazard of ingredient or product
Safety phrases identifying main safety measures to be used
National Occupational Health and Safety Commission

NTP National Toxicology Programme (USA)

IARC International Agency for Research on Cancer

Heartgard³⁰ is a registered trademark of Merial.

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