

Ranvet's Allwormer for Dogs

Ranvet

Chemwatch: 4787-60

Version No: 6.1

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 1

Issue Date: 11/01/2019

Print Date: 07/18/2022

L.GHS.AUS.EN.E

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

| | |
|-------------------------------|-----------------------------|
| Product name | Ranvet's Allwormer for Dogs |
| Chemical Name | Not Applicable |
| Synonyms | Not Available |
| Chemical formula | Not Applicable |
| Other means of identification | Not Available |

Relevant identified uses of the substance or mixture and uses advised against

| | |
|--------------------------|--------------------------------------------------------------------------------------------------------------------|
| Relevant identified uses | For the treatment of the following parasites of dogs: Roundworm, Hookworm, Whipworm, Tapeworm and Hyatid Tapeworm. |
|--------------------------|--------------------------------------------------------------------------------------------------------------------|

Details of the supplier of the safety data sheet

| | |
|-------------------------|-----------------------------------------------------------------------------------------------|
| Registered company name | Ranvet |
| Address | 10-12 Green Street Banksmeadow NSW 2019 Australia |
| Telephone | +61 2 9666 1744 |
| Fax | +61 2 9666 1755 |
| Website | http://www.ranvet.com.au/other_msds.htm |
| Email | info@ranvet.com.au |

Emergency telephone number

| | |
|-----------------------------------|-----------------|
| Association / Organisation | Ranvet |
| Emergency telephone numbers | +61 425 061 584 |
| Other emergency telephone numbers | Not Available |

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

ChemWatch Hazard Ratings

| | Min | Max | |
|--------------|-----|-----|-------------------------------------------------------------------|
| Flammability | 0 | | |
| Toxicity | 1 | | |
| Body Contact | 1 | | |
| Reactivity | 0 | | |
| Chronic | 0 | | |
| | | | 0 = Minimum 1 = Low 2 = Moderate 3 = High 4 = Extreme |

| | |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Poisons Schedule | S5 |
| Classification [1] | Serious Eye Damage/Eye Irritation Category 2B |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI |

Label elements

| | |
|---------------------|----------------|
| Hazard pictogram(s) | Not Applicable |
| Signal word | Warning |

Hazard statement(s)

| | |
|------|------------------------|
| H320 | Causes eye irritation. |
|------|------------------------|

Precautionary statement(s) Prevention

| | |
|------|-----------------------------------------------------------------|
| P264 | Wash all exposed external body areas thoroughly after handling. |
|------|-----------------------------------------------------------------|

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Precautionary statement(s) Response

| | |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|-----------|--------------------------------------------|
| 68813-55-8 | 30-60 | <u>oxantel pamoate</u> |
| Not Available | | [542 mg/tab] |
| 22204-24-6 | 10-30 | <u>pyrantel pamoate</u> |
| Not Available | | [143 mg/tab] |
| 55268-74-1 | <10 | <u>praziquantel</u> |
| Not Available | | [50 mg/tab] |
| Not Available | balance | Ingredients determined not to be hazardous |

Legend:

1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L; * EU IOELVs available

SECTION 4 First aid measures

Description of first aid measures

| | |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye Contact | <ul style="list-style-type: none"> Generally not applicable. |
| Skin Contact | If skin or hair contact occurs: <ul style="list-style-type: none"> Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. |
| Inhalation | <ul style="list-style-type: none"> If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. |
| Ingestion | <ul style="list-style-type: none"> If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Firefighting measures

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

| | |
|----------------------|-------------|
| Fire Incompatibility | None known. |
|----------------------|-------------|

Advice for firefighters

| | |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Fighting | <ul style="list-style-type: none"> Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Slight hazard when exposed to heat, flame and oxidisers. |
| Fire/Explosion Hazard | <ul style="list-style-type: none"> Non combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of: nitrogen oxides (NOx) May emit poisonous fumes. |

Continued...

| | |
|---------|---------------------------------------------------|
| | May emit corrosive fumes. carbon monoxide (CO) |
| HAZCHEM | Not Applicable |

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

| | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minor Spills | <ul style="list-style-type: none">▸ Clean up all spills immediately.▸ Secure load if safe to do so.▸ Bundle/collect recoverable product.▸ Collect remaining material in containers with covers for disposal. |
| Major Spills | <ul style="list-style-type: none">▸ Clean up all spills immediately.▸ Wear protective clothing, safety glasses, dust mask, gloves.▸ Secure load if safe to do so. Bundle/collect recoverable product.▸ Use dry clean up procedures and avoid generating dust.▸ Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).▸ Water may be used to prevent dusting.▸ Collect remaining material in containers with covers for disposal.▸ Flush spill area with water. |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

| | |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safe handling | <ul style="list-style-type: none">▸ Avoid all personal contact, including inhalation.▸ Wear protective clothing when risk of exposure occurs.▸ Use in a well-ventilated area.▸ Prevent concentration in hollows and sumps.▸ DO NOT enter confined spaces until atmosphere has been checked.▸ DO NOT allow material to contact humans, exposed food or food utensils.▸ Avoid contact with incompatible materials.▸ When handling, DO NOT eat, drink or smoke.▸ Keep containers securely sealed when not in use.▸ Avoid physical damage to containers.▸ Always wash hands with soap and water after handling.▸ Work clothes should be laundered separately. Launder contaminated clothing before re-use.▸ Use good occupational work practice.▸ Observe manufacturer's storage and handling recommendations contained within this SDS.▸ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. |
| Other information | <ul style="list-style-type: none">▸ Store away from incompatible materials. |

Conditions for safe storage, including any incompatibilities

| | |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable container | <ul style="list-style-type: none">▸ Polyethylene or polypropylene container.▸ Packing as recommended by manufacturer.▸ Check all containers are clearly labelled and free from leaks.▸ Glass container is suitable for laboratory quantities |
| Storage incompatibility | <ul style="list-style-type: none">▸ Avoid reaction with oxidising agents |

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

| Ingredient | TEEL-1 | TEEL-2 | TEEL-3 |
|-----------------------------|---------------|---------------|---------------|
| Ranvet's Allwormer for Dogs | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|------------------|---------------|---------------|
| oxantel pamoate | Not Available | Not Available |
| pyrantel pamoate | Not Available | Not Available |
| praziquantel | Not Available | Not Available |

Occupational Exposure Banding

| Ingredient | Occupational Exposure Band Rating | Occupational Exposure Band Limit |
|------------|-----------------------------------|----------------------------------|
|------------|-----------------------------------|----------------------------------|

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| Ingredient | Occupational Exposure Band Rating | Occupational Exposure Band Limit |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------|
| pyrantel pamoate | E | ≤ 0.01 mg/m ³ |
| Notes: Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health. | | |

MATERIAL DATA

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

OSHA (USA) concluded that exposure to sensory irritants can:

- ▶ cause inflammation
- ▶ cause increased susceptibility to other irritants and infectious agents
- ▶ lead to permanent injury or dysfunction
- ▶ permit greater absorption of hazardous substances and
- ▶ acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

Exposure controls

| | | |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Appropriate engineering controls | <p>Enclosed local exhaust ventilation is required at points of dust, fume or vapour generation. HEPA terminated local exhaust ventilation should be considered at point of generation of dust, fumes or vapours. Barrier protection or laminar flow cabinets should be considered for laboratory scale handling. A fume hood or vented balance enclosure is recommended for weighing/ transferring quantities exceeding 500 mg. When handling quantities up to 500 gram in either a standard laboratory with general dilution ventilation (e.g. 6-12 air changes per hour) is preferred. Quantities up to 1 kilogram may require a designated laboratory using fume hood, biological safety cabinet, or approved vented enclosures. Quantities exceeding 1 kilogram should be handled in a designated laboratory or containment laboratory using appropriate barrier/ containment technology. Manufacturing and pilot plant operations require barrier/ containment and direct coupling technologies. Barrier/ containment technology and direct coupling (totally enclosed processes that create a barrier between the equipment and the room) typically use double or split butterfly valves and hybrid unidirectional airflow/ local exhaust ventilation solutions (e.g. powder containment booths). Glove bags, isolator glove box systems are optional. HEPA filtration of exhaust from dry product handling areas is required. Fume-hoods and other open-face containment devices are acceptable when face velocities of at least 1 m/s (200 feet/minute) are achieved. Partitions, barriers, and other partial containment technologies are required to prevent migration of the material to uncontrolled areas. For non-routine emergencies maximum local and general exhaust are necessary. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.</p> | |
| | Type of Contaminant: | Air Speed: |
| | solvent, vapours, etc. evaporating from tank (in still air) | 0.25-0.5 m/s (50-100 f/min.) |
| | aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers (released at low velocity into zone of active generation) | 0.5-1 m/s (100-200 f/min.) |
| Appropriate engineering controls | direct spray, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion) | 1-2.5 m/s (200-500 f/min.) |
| | Within each range the appropriate value depends on: | |
| | Lower end of the range | Upper end of the range |
| | 1: Room air currents minimal or favourable to capture | 1: Disturbing room air currents |
| Appropriate engineering controls | 2: Contaminants of low toxicity or of nuisance value only. | 2: Contaminants of high toxicity |
| | 3: Intermittent, low production. | 3: High production, heavy use |
| | 4: Large hood or large air mass in motion | 4: Small hood-local control only |
| | <p>Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2.5 m/s (200-500 f/min.) for extraction of gases discharged 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</p> <p>The need for respiratory protection should also be assessed where incidental or accidental exposure is anticipated: Dependent on levels of contamination, PAPR, full face air purifying devices with P2 or P3 filters or air supplied respirators should be evaluated.</p> <p>The following protective devices are recommended where exposures exceed the recommended exposure control guidelines by factors of:</p> <p>10; high efficiency particulate (HEPA) filters or cartridges 10-25; loose-fitting (Tyvek or helmet type) HEPA powered-air purifying respirator. 25-50; a full face-piece negative pressure respirator with HEPA filters 50-100; tight-fitting, full face-piece HEPA PAPR 100-1000; a hood-shroud HEPA PAPR or full face-piece supplied air respirator operated in pressure demand or other positive pressure mode.</p> | |
| Personal protection |  | |
| Eye and face protection | <p>When handling very small quantities of the material eye protection may not be required. For laboratory, larger scale or bulk handling or where regular exposure in an occupational setting occurs:</p> <ul style="list-style-type: none"> ▶ Chemical goggles. ▶ Face shield. Full face shield may be required for supplementary but never for primary protection of eyes. ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in | |

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|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent] |
| Skin protection | See Hand protection below |
| Hands/feet protection | <ul style="list-style-type: none"> ▶ Rubber gloves (nitrile or low-protein, powder-free latex, latex/ nitrile). Employees allergic to latex gloves should use nitrile gloves in preference. ▶ Double gloving should be considered. ▶ PVC gloves. ▶ Change gloves frequently and when contaminated, punctured or torn. ▶ Wash hands immediately after removing gloves. ▶ Protective shoe covers. [AS/NZS 2210] ▶ Head covering. |
| Body protection | See Other protection below |
| Other protection | <ul style="list-style-type: none"> ▶ For quantities up to 500 grams a laboratory coat may be suitable. ▶ For quantities up to 1 kilogram a disposable laboratory coat or coverall of low permeability is recommended. Coveralls should be buttoned at collar and cuffs. ▶ For quantities over 1 kilogram and manufacturing operations, wear disposable coverall of low permeability and disposable shoe covers. ▶ For manufacturing operations, air-supplied full body suits may be required for the provision of advanced respiratory protection. ▶ Eye wash unit. ▶ Ensure there is ready access to an emergency shower. ▶ For Emergencies: Vinyl suit |

Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

| Required minimum protection factor | Maximum gas/vapour concentration present in air p.p.m. (by volume) | Half-face Respirator | Full-Face Respirator |
|------------------------------------|--------------------------------------------------------------------|----------------------|----------------------|
| up to 10 | 1000 | -AUS / Class1 P2 | - |
| up to 50 | 1000 | - | -AUS / Class 1 P2 |
| up to 50 | 5000 | Airline * | - |
| up to 100 | 5000 | - | -2 P2 |
| up to 100 | 10000 | - | -3 P2 |
| 100+ | | | Airline** |

* - Continuous Flow ** - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

SECTION 9 Physical and chemical properties**Information on basic physical and chemical properties**

| | | | |
|-----------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------|----------------|
| Appearance | Pinkish with random pale blotches, round tablet; partially miscible with water. | | |
| Physical state | Manufactured | Relative density (Water = 1) | Not Available |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Applicable |
| pH (as supplied) | Not Applicable | Decomposition temperature (°C) | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | Not Applicable | Taste | Not Available |
| Evaporation rate | Not Applicable | Explosive properties | Not Available |
| Flammability | Not Applicable | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Applicable | Surface Tension (dyn/cm or mN/m) | Not Applicable |
| Lower Explosive Limit (%) | Not Applicable | Volatile Component (%vol) | Negligible |
| Vapour pressure (kPa) | Negligible | Gas group | Not Available |

Continued...

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| | | | |
|---------------------------------|-----------------|------------------------------------------|---------------|
| Solubility in water | Partly miscible | pH as a solution (Not Available%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 Stability and reactivity

| | |
|-------------------------------------------|---------------------------------------------------------------------------|
| Reactivity | See section 7 |
| Chemical stability | Product is considered stable and hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 Toxicological information

Information on toxicological effects

| | |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhaled | Not normally a hazard due to non-volatile nature of product |
| Ingestion | Accidental ingestion of the material may be damaging to the health of the individual. Ingestion may result in sore throat, abdominal pain, with central nervous system effects, headache, dizziness, drowsiness |
| Skin Contact | The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. |
| Eye | Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur. |
| Chronic | Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. |

| | | |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Ranvet's Allwormer for Dogs | TOXICITY | IRRITATION |
| | Not Available | Not Available |
| oxantel pamoate | TOXICITY | IRRITATION |
| | Not Available | Not Available |
| pyrantel pamoate | TOXICITY | IRRITATION |
| | Oral (Rat) LD50; >4000 mg/kg ^[2] | Not Available |
| praziquantel | TOXICITY | IRRITATION |
| | Oral (Dog) LD50; >200 mg/kg ^[2] | Not Available |
| Legend: | 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances | |

| | |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PYRANTEL PAMOATE | NOAEL rat, rabbit 250 mg/kg/day. * [* = PFIZER] Somnolence, convulsions, respiratory stimulation, foetotoxicity, maternal effects, effects on newborn recorded. For pyrantel: Acute toxicity: Liver changes were reported at 250 and 500 mg/kg/day pyrantel pamoate for one month. In a 13-week oral toxicity study, dogs showed loose stools or diarrhoea and increased liver enzymes at doses of 300 and 600 mg/kg/day Chronic toxicity: A study conducted in rats and dogs or two-years using the better absorbed tartrate salt showed: ▸ in rats - depressed weight gain and food consumption, depressed blood cell parameters and liver changes at 50 and 200 mg/kg/day ▸ in dogs, signs of toxicity included vomiting salivation and relaxation of nictitating membranes were observed at 25 mg/kg/day and higher - a dose related increase in liver weights was also observed at 25 and 50 mg/kg/day Reproductive toxicity: No evidence of adverse effects on fertility, reproduction or lactation was observed for pyrantel pamoate in rats at oral doses of 25 or 250 mg/kg/day. No maternal toxicity, embryo or foetotoxicity were observed in perinatal or postnatal toxicity studies. Developmental toxicity: No evidence of teratogenicity or embryotoxicity was observed for the pamoate in rats and rabbits at oral doses up to 250 mg/kg/day |
| PRAZIQUANTEL | * Bayer ADI: 0.02 mg/kg/day NOEL: 20 mg/kg/day NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA. |
| Ranvet's Allwormer for Dogs & OXANTEL PAMOATE | No significant acute toxicological data identified in literature search. |

| | | | |
|--------------------------------------|---|-------------------------------|---|
| Acute Toxicity | ✗ | Carcinogenicity | ✗ |
| Skin Irritation/Corrosion | ✗ | Reproductivity | ✗ |
| Serious Eye Damage/Irritation | ✓ | STOT - Single Exposure | ✗ |

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| | | | |
|-----------------------------------|---|--------------------------|---|
| Respiratory or Skin sensitisation | ✗ | STOT - Repeated Exposure | ✗ |
| Mutagenicity | ✗ | Aspiration Hazard | ✗ |

Legend: ✗ – Data either not available or does not fill the criteria for classification
 ✔ – Data available to make classification

SECTION 12 Ecological information

Toxicity

| Ranvet's Allwormer for Dogs | Endpoint | Test Duration (hr) | Species | Value | Source |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|---------------|-----------------|---------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| oxantel pamoate | Endpoint | Test Duration (hr) | Species | Value | Source |
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| pyrantel pamoate | Endpoint | Test Duration (hr) | Species | Value | Source |
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| praziquantel | Endpoint | Test Duration (hr) | Species | Value | Source |
| | NOEC(ECx) | 504h | Fish | 24.7mg/L | 4 |
| | LC50 | 96h | Fish | 22.17-38.51mg/l | 4 |
| Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data | | | | | |

DO NOT discharge into sewer or waterways.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------|---------------------------------------|---------------------------------------|
| | No Data available for all ingredients | No Data available for all ingredients |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|------------|---------------------------------------|
| | No Data available for all ingredients |

Mobility in soil

| Ingredient | Mobility |
|------------|---------------------------------------|
| | No Data available for all ingredients |

SECTION 13 Disposal considerations

Waste treatment methods

| Product / Packaging disposal | <ul style="list-style-type: none"> ▶ Recycle wherever possible or consult manufacturer for recycling options. ▶ Consult State Land Waste Management Authority for disposal. ▶ Bury residue in an authorised landfill. ▶ Recycle containers if possible, or dispose of in an authorised landfill. |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

SECTION 14 Transport information

Labels Required

| Marine Pollutant | NO |
|------------------|----------------|
| HAZCHEM | Not Applicable |

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name | Group |
|-----------------|---------------|
| oxantel pamoate | Not Available |

Continued...

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| Product name | Group |
|------------------|---------------|
| pyrantel pamoate | Not Available |
| praziquantel | Not Available |

Transport in bulk in accordance with the ICG Code

| Product name | Ship Type |
|------------------|---------------|
| oxantel pamoate | Not Available |
| pyrantel pamoate | Not Available |
| praziquantel | Not Available |

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

oxantel pamoate is found on the following regulatory lists

| | |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Australian Inventory of Industrial Chemicals (AIIC) | International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS) |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|

pyrantel pamoate is found on the following regulatory lists

| | |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2 | International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS) |
| Australian Inventory of Industrial Chemicals (AIIC) | |

praziquantel is found on the following regulatory lists

| | |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Australia Chemicals with non-industrial uses removed from the Australian Inventory of Chemical Substances (old Inventory) | Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4 |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|

National Inventory Status

| National Inventory | Status |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Australia - AIIC / Australia Non-Industrial Use | Yes |
| Canada - DSL | No (oxantel pamoate; pyrantel pamoate; praziquantel) |
| Canada - NDLS | No (oxantel pamoate; pyrantel pamoate; praziquantel) |
| China - IECSC | No (oxantel pamoate; pyrantel pamoate) |
| Europe - EINEC / ELINCS / NLP | Yes |
| Japan - ENCS | No (oxantel pamoate; pyrantel pamoate; praziquantel) |
| Korea - KECI | No (oxantel pamoate; praziquantel) |
| New Zealand - NZIoC | Yes |
| Philippines - PICCS | No (pyrantel pamoate) |
| USA - TSCA | No (oxantel pamoate; pyrantel pamoate; praziquantel) |
| Taiwan - TCSI | No (oxantel pamoate) |
| Mexico - INSQ | No (oxantel pamoate; pyrantel pamoate; praziquantel) |
| Vietnam - NCI | No (oxantel pamoate) |
| Russia - FBEPH | No (oxantel pamoate; pyrantel pamoate) |
| Legend: | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. |

SECTION 16 Other information

| | |
|---------------|------------|
| Revision Date | 11/01/2019 |
| Initial Date | 11/01/2009 |

SDS Version Summary

| Version | Date of Update | Sections Updated |
|---------|----------------|--------------------------------------------------------------------------------|
| 4.1 | 07/25/2016 | Ingredients |
| 6.1 | 11/01/2019 | One-off system update. NOTE: This may or may not change the GHS classification |

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average
 PC – STEL: Permissible Concentration-Short Term Exposure Limit
 IARC: International Agency for Research on Cancer
 ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit.
IDLH: Immediately Dangerous to Life or Health Concentrations
ES: Exposure Standard
OSF: Odour Safety Factor
NOAEL: No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index
AIC: Australian Inventory of Industrial Chemicals
DSL: Domestic Substances List
NDSL: Non-Domestic Substances List
IECSC: Inventory of Existing Chemical Substance in China
EINECS: European Inventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
NLP: No-Longer Polymers
ENCS: Existing and New Chemical Substances Inventory
KECI: Korea Existing Chemicals Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances
TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory
INSQ: Inventario Nacional de Sustancias Químicas
NCI: National Chemical Inventory
FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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