MATERIAL SAFETY DATA SHEET
Animec Super Injection

Issue date: 13 December, 2017 Review date: 13 December, 2022

SECTION 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product name: ANIMEC SUPER INJECTION

Recommended Use: Injectable parasiticide with anthelmintic & fasciolicidal properties for cattle.

Company identification Address:

1229 Maraekakaho Road
Hastings 4175
New Zealand
Phone (06) 873 3611

Poisons Information Centre: 0800-764-766
Or CHEMCAL 0800-243-622 24hr emergencies only

Transport Emergency 111 Fire and police

SECTION 2: HAZARD IDENTIFICATION

2.1 Hazard classification: 6.1D, 6.6B, 6.8B, 6.9B, 9.1A, 9.2C, 9.3C, 9.4A

2.1 Priority Identifiers: WARNING

2.3 Secondary Identifiers:

6.1D = Harmful if swallowed
6.6B = Suspected of causing genetics defects
6.8B = Suspected of damaging fertility or the unborn child
6.9B = Ivermectin may cause damage to organs. Clorsulon may cause damage to kidneys
9.1A = Very toxic to aquatic life with long lasting effects
9.2C = Harmful to the soil environment
9.3C = Harmful to terrestrial vertebrates
9.4A = Very toxic to terrestrial invertebrates

SECTION 3: COMPOSITION INFORMATION

INGREDIENT	CAS Number.	Proportion
Ivermectin	70288-86-7	1.0%
Clorsulon	60200-06-8	10%
Glycerine formal	NA	40%
Other ingredients	NA	to 100

SECTON 4: FIRST AID MEASURES

4.1 **General Information:** Consult the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor immediately in every case of suspected poisoning. If medical advice is needed, have a product container or label at hand. Get medical advice/attention if you feel unwell.

4.2 **Inhalation** – Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

4.3 **Ingestion** – If swallowed DO NOT induce vomiting. Rinse mouth. For advice, contact the National Poisons Centre on 0800 POISON (0800 764 766). Seek medical assistance immediately advising name of product.

4.4 **Skin Contact** – Remove contaminated clothing and wash affected area thoroughly with soap and water. If a large area is affected seek medical assistance. If skin irritation or rash occurs, get medical advice.

4.5 **Eyes** – If splashed in eyes flush with plenty of water for several minutes, holding eyelids open if necessary. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Flammability: Not classified as flammable

5.2 Hazardous Combustion Products: If involved in a fire, may evolve carbon monoxide

5.3 Extinguishing Media: Water fog, foam, carbon dioxide or dry chemical. Full water jet deemed unsuitable as it may spread the flame

5.4 Protective Equipment: Full protective clothing

5.5 HAZCHEM Code: 3Z

5.6 Location Certificate: Not applicable

5.7 Hazardous Atmosphere Zone: Not applicable

5.8 Fire Extinguishers: Not applicable

5.9 Additional information: Exposure to fire may cause container to rupture. Collect contaminated fire fighting media, not to be discharged to drain.

SECTION 6: ACCIDENTIAL RELEASE MEASURES

6.1 **Personal Precautions:** Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

6.2 **Avoid contact with skin, eyes and clothing.** See Section 8 of the SDS for Personal Protective Equipment.

6.3 **Spills and Disposal:** Wear appropriate protective clothing. Exclude non-essential people from the area. Reposition any leaking containers so as to minimise further leakage.Contain spill, Dam and absorb spill with an absorbent material (e.g. sand, soil or absorbent granules) and place in a sealable waste container or use according to label directions. Dispose of waste safely in an approved landfill.

6.4 **Protective Clothing:** For appropriate personal protective equipment see section 8.

6.5 **Environmental Precaution:** Prevent from entering drains, waterways or sewers. If spill does enter waterways contact local authority.

SECTION: 7 HANDLING AND STORAGE

7.1 **Handling:** Keep out of reach of children
Read label before use.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Avoid contact with hands and skin. Do not breathe mist/vapour.
Wear protective gloves.
Do not eat, drink or smoke during use of product.
Wash skin thoroughly after handling.
Keep container tightly closed when not in use.

7.2 **Certified Handler:** Not required.

7.3 **Tracking:** Not required.

7.4 **Record Keeping:** Records of use must be kept.

7.5 **Storage:** Store below 25°C (air conditioning). Store bottle in carton to protect from light. Store in tightly closed original container in a cool, dry, well-ventilated area out of direct sunlight when not in use. Store away from foodstuffs, children and animals. Keep container sealed when not in use.

7.15 **Other Information:** Always read the label before use. See label for further information on handling and storage.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 **Exposure Limits:** No exposure limits have been assigned for this product.

8.2 **Protective Equipment:** When opening the container and using the product wear protective clothing including waterproof gloves and eye protection, to avoid skin and eye contact.

8.3 **Engineering Controls:** Handle in well ventilated area. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. Avoid inhalation of mist/vapour.

8.4 **Hygiene Precautions:** Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing daily after work.

SECTION 9: PHYSICAL DESCRIPTION / PROPERTIES

Appearance:	Clear colourless liquid
Odour:	Characteristic scent
Odour threshhold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	No data available
Solubility (ies):	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Kinematic viscosity:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 **Stability:** Considered stable.

10.2 **Hazardous Polymerisation:** Hazardous polymerisation will not occur.

10.3 **Materials to Avoid:** None known

10.4 **Conditions to Avoid:** None known

10.5 **Hazardous decomposition products:** No hazardous products are expected, except when heated to decomposition

SECTION 11: TOXICOLOGICAL INFORMATION

Hazard Classifications:	6.1D, 6.6B, 6.8B, 6.9B
Acute toxicity:	
Oral:	Ivermectin: Mouse / LD50: 11.6 mg/kg
Dermal:	Ivermectin: Rabbit / LD50: 406 mg/kg
Aspiration hazard:	No information available
Respiratory irritation:	No information available
Skin corrosion/irritation:	Ivermectin: Mild irritant
Eye damage/ irritation:	No information available
Respiratory or skin sensitisation:	No information available
Mutagenicity:	Clorsulon: Mutagenic properties were tested in three in vitro and two in vivo tests. The three in vitro tests, Salmonella-microsomal assay, unscheduled synthesis DNA in human MRL-90 fibroblasts and measurement of DNA single strand breaks by alkaline elution in human MRL-90 fibroblasts gave negative results. However, positive results were obtained for the two in vivo tests, a bone marrow micronucelus test (oral doses up to 2000 mg/kg bw in mice) and the chromosomal aberration test (oral doses up to 500 mg/kg bw in mice).
Carcinogenicity:	No information available
Reproductive toxicity:	Ivermectin: Three multigeneration studies were initiated in rats, but the first two were halted prior to scheduled termination because neonatal toxicity was apparent at all dose-levels tested. In the final (threegeneration) study, the highest dose level was 0.4 mg per kg of body weight per day. The results indicated that ivermectin was toxic to neonatal rats at doses of 0.4 mg per kg of body weight per day or above (administered to adult females) as evidenced by increased neonatal mortality up to approximately ten days postpartum, and by the decreased weights of surviving offspring. The results of a cross-fostering study indicated that the neonatal toxicity was not related to in utero exposure but to postnatal exposure via maternal milk. Clorsulon: In a 3-generation study carried out in rats (0, 3, 30, 300 mg/kg bw orally), the reproductive performance of female rats, viablilty and growth of offspring in each generation were significantly affected at 300 mg/kg bw. There was no effect on the reproductive performance at the low and middle dose. A NOEL of 30 mg/kg bw/day was retained from this study.
Specific organ toxicity:	Ivermectin: Oral / EndPoint: NOAEL Primary Organ: The developmental toxicity of ivermectin has been investigated in mice, rats, rabbits, and dogs. The results demonstrated that teratogenic effects (cleft palates in mice, rats, and rabbits; clubbed forepaws without skeletal

alterations in rabbits) were produced only at dose levels similar to those causing severe toxic effects in pregnant animals. The no-observed-effect level for teratogencity in the most sensitive species and strain, the CF1 mouse, was 0.2 mg/kg b.w./day, while for maternal toxicity it was 0.1 mg/kg b.w./day.

Clorsulon:
Oral / EndPoint: LOAEL
Primary Organ: Renal toxicity (Kidney)
In a 54 week oral toxicity study in rats with a 27 week interim necropsy, groups of 60 albino rats (30 animals per sex and dose) received clorsulon by gavage at doses of 0 (0.5% aqueous methylcellulose), 0.2, 2 and 20 mg/kg bw/day. At interim sacrifice (10 animals per sex per dose), hyperplasia of the urinary bladder was reported in 4 and 7 males treated at 2 and 20 mg/kg bw, respectively. In females, this effects was only reported in 2 animals treated at the highest dose. At terminal sacrifice this finding was not so clear with 0 male and 1 female in the 2 mg/kg group, and 8 males and 2 females of the highest dose group showing urinary bladder hyperplasia. An increase in incidence and concentration of triplate phosphate crystals primarily in males, which became more proinant in week 51 was also described in the two highest dose groups. At the lowest dose, 0.2 mg/kg bw/day, only a significant increase of pH in urine of males was reported. In absence of hyperplasia of the urinary bladder, of histopathological effects in the kidney and of triplate phosphate crystals, this dose of 0.2 mg/kg bw/day was retained as a LOEL.

Narcotic effects: No information available

SECTION 12: ECOLOGICAL INFORMATION

12.1 **Hazard Classifications:** 9.1A, 9.2C, 9.3C, 9.4A

12.2 **Ecotoxicity:**

12.3 **Aquatic:** Ivermectin:
Fish: LC50 of 0.0032 mg/L for rainbow trout, and 0.0096 mg/L for bluegill sunfish
Crustacea: EC50 (48 hours) of 0.00036 mg/L
Mysid shrimp: EC50 (48 hours) 0.000022 mg/L (0.022 ppb).

12.4 **Terrestrial Vertebrates:** Ivermectin: Mouse: LD50: 11.6 mg/kg

12.5 **Terrestrial Invertebrates:** Ivermectin: Bee: LD50: 0.002 ug/bee

12.6 **Persistence/Mobility:** No information available

12.7 **Bioaccumulation:** Ivermectin: No

Lepomis macrochirus

Bluegill BCF = 56

Fresh Water, 28 d, Flow through, Whole fish.

12.8 **Mobility in soil:** Ivermectin: Soil DT 50 > 30 days: yes

SECTION 13: DISPOSAL INFORMATION

13.1 **Product Disposal:** Dispose of product only by using according to label or at an approved landfill

13.2 **Container Disposal:** Preferably dispose of the product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility. Crush and bury in an approved landfill if an approved recycling system is not available. Do not burn. Do NOT use container for any other purpose.

SECTION 14: TRANSPORT INFORMATION

UN Number: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ivermectin)

DG Class: 9

Packing Group: III

Environmental hazards: Marine pollutant

Special precautions when transporting the substance: Avoid release to the environment.

SECTION 15: REGULATORY INFORMATION

ACVM: Registered pursuant to the ACVM Act 1997, A11397
See www.foodsafety.govt.nz for registration conditions

EPA: Approved pursuant to the HSNO Act 1996, Code: HSR100757
See www.epa.govt.nz for approval controls.

DISCLAIMER
The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material. The information is provided in good faith based on current knowledge and experience. No warranty with regard to the product properties is expressed or implied.