SAFETY DATA SHEETS

This SDS packet was issued with item:

078924310

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078928992



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Ivermax® Plus (Ivermectin And Clorsulon) Injection

SECTION 1: Identification

Product identifier

Product name: Ivermax® Plus (Ivermectin And Clorsulon) Injection

Product code: 16371421, 11765142

Recommended use of the product and restriction on use

Relevant identified uses: Ivermax Plus Injection is indicated for the

effective treatment and control of parasites in cattle. **Uses advised against:** Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Supplier:

United States

Aspen Veterinary Resources Ltd 3155 W. Heartland Drive Liberty, MO 64068 1-800-792-1238

Emergency telephone number:

United States

CHEMTREC

Within USA and Canada: 1-800-424-9300 (24 hours)
Outside USA and Canada: +1-703-527-3887 (24 hours)

SECTION 2: Hazard(s) identification

GHS classification:

Eye irritation, category 2A Reproductive toxicity, category 2 Specific target organ toxicity - repeated exposure, category 2 Acute toxicity (oral), category 4

Label elements

Hazard pictograms:





Signal word: Warning

Hazard statements:

H319 Causes serious eye irritation

H361 Suspected of damaging fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

H302 Harmful if swallowed

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Precautionary statements:

P264 Wash hands thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P270 Do not eat, drink or smoke when using this product

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

P308+P313 IF exposed or concerned: Get medical advice/attention

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 Rinse mouth

P314 Get medical advice/attention if you feel unwell

P405 Store locked up

P501 Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified: None

Supplemental label elements:

0 percent of the mixture consists of ingredient(s) of unknown acute oral toxicity

SECTION 3: Composition/information on ingredients

| Identification | Name | Weight % |
|------------------------|---------------------------|----------|
| CAS number: 57-55-6 | Propane-1,2-diol | 49 |
| CAS number: 5464-28-8 | 1,3-dioxolan-4-ylmethanol | 19.2 |
| CAS number: 60200-06-8 | Clorsulon | 10 |
| CAS number: 70288-86-7 | Ivermectin | 1 |

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance. Take precautions to ensure your own safety before attempting rescue. Wear appropriate safety eyewear, gloves, protective clothing and respiratory protection to prevent exposure. See Section 8 of this SDS for personal protective equipment recommendations. Do not use the mouth to mouth method if victim has ingested or inhaled the product. Give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper device.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

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After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After eye contact:

Rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing. Acute oral exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Delayed symptoms and effects:

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death.

May cause damage to organs through prolonged or repeated exposure. Effects are dependent on exposure (dose, concentration, contact time).

Symptoms of exposure may be delayed.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Do not use water jet.

Specific hazards during fire-fighting:

Thermal decomposition may produce irritating/toxic fumes/gases.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

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Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Do not get on skin, eyes or on clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling. Remove contaminated clothing and launder before reuse.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Harmful if swallowed. Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Avoid breathing dust, mist, fumes, vapors or spray. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|-----------------------|------------------|------------|----------------------------------|
| WEEL | Propane-1,2-diol | 57-55-6 | 8-Hour TWA: 10 mg/m ³ |

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts

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below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| A | Character Park |
|-----------------------------------------|----------------------------------|
| Appearance | Clear solution |
| Odor | Not determined or not available. |
| Odor threshold | Not determined or not available. |
| рН | Not determined or not available. |
| Melting point/freezing point | Not determined or not available. |
| Initial boiling point/range | Not determined or not available. |
| Flash point (closed cup) | Not determined or not available. |
| Evaporation rate | Not determined or not available. |
| Flammability (solid, gas) | Not determined or not available. |
| Upper flammability/explosive limit | Not determined or not available. |
| Lower flammability/explosive limit | Not determined or not available. |
| Vapor pressure | Not determined or not available. |
| Vapor density | Not determined or not available. |
| Density | Not determined or not available. |
| Relative density | Not determined or not available. |
| Solubilities | Not determined or not available. |
| Partition coefficient (n-octanol/water) | Not determined or not available. |
| Auto/Self-ignition temperature | Not determined or not available. |
| Decomposition temperature | Not determined or not available. |
| Dynamic viscosity | Not determined or not available. |
| Kinematic viscosity | Not determined or not available. |

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| Explosive properties | Not determined or not available. |
|----------------------|----------------------------------|
| Oxidizing properties | Not determined or not available. |

Other information

SECTION 10: Stability and reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible materials:

Strong acids, strong bases, strong oxidizers.

Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity

Assessment:

Harmful if swallowed.

Product data:

| Route | Result |
|-------|-------------------------------|
| Oral | LD50 Test species: 1000 mg/kg |

Substance data:

| Name | Route | Result |
|---------------------------|------------|-------------------------------|
| Propane-1,2-diol | oral | LD50 Rat: 21000 - 33700 mg/kg |
| | dermal | LD50 Rabbit: >2000 mg/kg |
| 1,3-dioxolan-4-ylmethanol | oral | LD50 Mouse: 8000 mg/kg |
| Clorsulon | oral | LD50 Rat: 10000 mg/kg |
| Ivermectin | oral | LD50 Rat: 10 mg/kg |
| | Dermal ATE | LD50 Rat: 300 mg/kg |

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment:

Causes serious eye irritation.

Product data:

No data available.

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Substance data:

| Name | Result |
|---------------------------|--------------------------------|
| 1,3-dioxolan-4-ylmethanol | Causes serious eye irritation. |
| Clorsulon | Causes serious eye irritation. |

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. **Substance data:** No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

OSHA Carcinogens: Not applicable

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Reproductive toxicity

Assessment:

Suspected of damaging fertility or the unborn child.

Product data: No data available.

Substance data:

| Name | Result |
|------------|------------------------------------------------------|
| Ivermectin | Suspected of damaging fertility or the unborn child. |

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment:

May cause damage to organs through prolonged or repeated exposure.

Product data:No data available.

Substance data:

| Name | Result |
|------------|--------------------------------------------------------------------|
| Ivermectin | May cause damage to organs through prolonged or repeated exposure. |

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

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Product data:No data available.

Substance data: No data available.

Information on likely routes of exposure:
Ingestion, inhalation, eye and skin contact.

Symptoms related to the physical, chemical and toxicological characteristics:

See section 4 of this SDS.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

| Name | Result |
|------------------|----------------------------------------------|
| Propane-1,2-diol | EC50 Daphnia magna: 43500 mg/L (48 hr) |
| | LC50 Oncorhynchus mykiss: 40613 mg/L (96 hr) |

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

| Name | Result |
|------------------|------------------------------------------------------|
| Propane-1,2-diol | EC50 Selenastrum capricornutum: 18100 mg/L (14 days) |

Persistence and degradability

Product data: No data available.

Substance data:

| Name | Result |
|------------------|-----------------------------------------------------|
| Propane-1,2-diol | Readily biodegradable (80% degradation in 28 days). |

Bioaccumulative potential

Product data: No data available.

Substance data:

| Name | Result | |
|------------------|-----------------------------------------------------------------|--|
| Propane-1,2-diol | Low potential for bioaccumulation (BCF: 0.09). | |
| Clorsulon | The substance is not expected to bioaccumulate (Log Kow: 1.09). | |

Mobility in soil

Product data: No data available.
Substance data: No data available.
Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT. **vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

Substance data: PBT assessment:

Propane-1,2-diol The substance is not PBT.

vPvB assessment:

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| Propane-1,2-diol | The substance is not vPvB. |
|------------------|----------------------------|
| 1 ' | |

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

| UN number | 3082 |
|-------------------------------|------------------------------------------------------------------|
| UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (Ivermectin) |
| UN transport hazard class(es) | 9 |
| Packing group | III |
| Environmental hazards | None |
| Special precautions for user | None |
| Stowage category | A |

International Maritime Dangerous Goods (IMDG)

| UN number | 3082 | |
|-------------------------------|------------------------------------------------------------------|--|
| UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (Ivermectin) | |
| UN transport hazard class(es) | 9 | |
| Packing group | III | |
| Environmental hazards | None | |
| Special precautions for user | None | |
| EMS number | F-A, S-F | |
| Stowage category | A | |
| Excepted quantities | E1 | |
| Limited quantity | 5L | |

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

| UN number | 3082 | |
|-------------------------------|------------------------------------------------------------------|--|
| UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (Ivermectin) | |
| UN transport hazard class(es) | 9 | |
| Packing group | III | |
| Environmental hazards | None | |

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| Special precautions for user | None |
|------------------------------|---------|
| ERG code | 9L |
| Excepted quantities | E1 |
| Passenger and cargo | 450 L |
| Cargo aircraft only | 450 L |
| Limited quantity | 30 kg G |

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals: None of the ingredients are listed.

CERCLA: None of the ingredients are listed. **RCRA:** None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know: None of the ingredients are listed.

New Jersey Right to Know:

| 57-55-6 | Propane-1,2-diol | Listed |
|---------|------------------|--------|
|---------|------------------|--------|

New York Right to Know: None of the ingredients are listed.

Pennsylvania Right to Know:

| 57-55- | 6 | Propane-1,2-diol | Listed |
|--------|---|------------------|--------|
|--------|---|------------------|--------|

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-0-0 **HMIS:** 2*-0-0

Initial preparation date: 02.08.2016

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Revision Notes:

| Revision Date | Notes |
|---------------|------------|
| 2021-02-09 | Version 2. |

End of Safety Data Sheet