



Safety Data Sheet

according to WHS Regulations

Printing date 29.05.2017

Revision: 29.05.2017

1 Identification

Product Name: PASTORAL AG MOXIDECTIN ORAL DRENCH FOR SHEEP WITH SELENIUM

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use:

Control and treatment of internal and external parasites and selenium responsive conditions of sheep.

Details of Manufacturer or Importer:

Titan Ag Pty Ltd
15/16 Princes Street
Newport NSW 2106

Phone Number: 02 9999 6655

Emergency telephone number: 02 9999 6655

2 Hazard(s) Identification

Hazardous Nature:

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Signal Word Void

Hazard Statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P273 Avoid release to the environment.

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

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

113507-06-5	Moxidectin ⚠ Acute Toxicity (Oral) 2, H300; ⚠ STOT RE 1, H372; ⚠ Serious Eye Damage/Irritation 2A, H319	<1%
13410-01-0	Sodium selenate ⚠ Acute Toxicity (Oral) 2, H300; Acute Toxicity (Inhalation) 2, H330; ⚠ STOT RE 2, H373	<0.5%

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin irritation, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms persist.

Eye Contact:

In case of eye irritation, hold eyelids open and rinse with water for 15 minutes. Seek immediate medical attention.

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Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

5 Fire Fighting Measures

Suitable Extinguishing Media: Foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and metal oxides.
Product is not combustible.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear appropriate respiratory protection and protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Wash area after spill.

7 Handling and Storage**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container tightly closed when not in use. Protect from direct sunlight. Keep away from strong oxidising agents. Protect containers against physical damage and check regularly for leaks.

8 Exposure controls and personal protection**Exposure Standards:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

PVC or rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

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Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Liquid
Colour:	Clear pale yellow
Odour:	Aromatic
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	~0 °C
Initial Boiling Point/Boiling Range:	~100 °C (at 100 kPa)
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure at 20 °C:	2.37 KPa (water vapour pressure)
Relative Density:	,
Vapour Density:	As for water.
Evaporation Rate:	As for water.
Solubility in Water:	Completely soluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Direct sunlight.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products: Oxides of carbon and metal oxides.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****113507-06-5 Moxidectin**

Oral	LD50	106 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

Acute Health Effects

Inhalation: No adverse health effects expected.

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Skin: No adverse health effects expected.**Eye:** No adverse health effects expected.**Ingestion:** Accidental ingestion of the material may be damaging to the health.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.**Chronic Health Effects:**

Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

Existing Conditions Aggravated by Exposure: No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for moxidectin for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing Office of Chemical Safety, 'ADI List', June 2014).

12 Ecological Information

Ecotoxicity:

Moxidectin:

LD50 (21 day oral) 365 mg/kg (mallard)

LD50 (14 day oral) 283 mg/kg (chicken)

LC50/ 28 day 37.2 mg/kg (earthworm)

Aquatic toxicity:**113507-06-5 Moxidectin**EC₅₀/48 h 0.03 ppb (daphnia)EC₅₀/72 h >87 ppb (green algae)LC₅₀/96 h 0.16 ppb (rainbow trout)

0.62 ppb (bluegill)

Persistence and Degradability: This product is biodegradable.**Bioaccumulative Potential:** This product It will not accumulate in the soil or water.**Mobility in Soil:** Low (KOC = 48.64)**Other adverse effects:** No information available

13 Disposal considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

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Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport information**UN Number** Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated**Marine pollutant:** No**15 Regulatory information****Australian Inventory of Chemical Substances:**

113507-06-5 Moxidectin

13410-01-0 Sodium selenate

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 5

16 Other information**Date of Preparation or Last Revision:** 29.05.2017**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC₅₀: Lethal concentration, 50 percentLD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 2: Acute toxicity – Category 2

Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term (Chronic). Category 3

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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