

## 1 Identification

**Product Name: PASTORAL AG DORAMECTIN POUR-ON ENDECTOCIDE FOR CATTLE**

**Other Means of Identification:** Mixture

**Recommended Use of the Chemical and Restriction on Use:** Veterinary endectocide.

**Details of Manufacturer or Importer:**

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

**Phone Number:** 02 9999 6655

**Emergency telephone number:** 02 9999 6655

## 2 Hazard(s) Identification

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



flame

Flammable Liquids 2

H225 Highly flammable liquid and vapour.



Serious Eye Damage/Irritation 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Toxic To Reproduction - Lact. H362 May cause harm to breast-fed children.

Aquatic Acute 3 H402 Harmful to aquatic life.

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

**Signal Word** Danger

**Hazard Statements**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H362 May cause harm to breast-fed children.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

P201 Obtain special instructions before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dusts or mists.

P263 Avoid contact during pregnancy/while nursing.

P264 Wash hands thoroughly after handling.

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

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P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use to extinguish: CO <sub>2</sub> , powder or water spray.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
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:

CAS: 67-63-0	Propan-2-ol ⚠ Flammable Liquids 2, H225; ⚠ Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H336	60 - 85%
CAS: 117704-25-3	Doramectin ⚠ Toxic To Reproduction 2, H361-H362; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Toxicity (Oral) 4, H302	0.5%
CAS: 102-71-6	Triethanolamine ⚠ Skin Corrosion/Irritation 2, H315; ⚠ Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335	<0.1%

### 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 contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

#### Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms occur.

#### Ingestion:

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

#### Symptoms Caused by Exposure:

Inhalation: May cause drowsiness and dizziness, headache, nausea and vomiting.

Skin Contact: May cause skin irritation.

Eye Contact: Causes serious eye irritation, redness, swelling, blurred vision and lachrymation.

Ingestion: May be harmful if swallowed.

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### 5 Fire Fighting Measures

**Suitable Extinguishing Media:**

Water fog, alcohol resistant foam, dry chemical or carbon dioxide. Do not use water jet as it may spread the fire.

**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include toxic and irritating fumes.

Product is highly flammable. Vapours may travel considerable distances to a source of ignition where they can ignite, flashback, or explode.

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

**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 approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.

Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

**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. Never return spills to original containers for re-use. Use only non-sparking tools. Wash spill area thoroughly to remove residues.

### 7 Handling and Storage

**Precautions for Safe Handling:**

May cause harm to breast-fed children. Pregnant or breast-feeding women must not handle this substance.

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Take precautionary measures against static discharge. 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 container tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents, acids, isocyanates and chlorine.

Store below 30°C.

### 8 Exposure Controls and Personal Protection

**Exposure Standards:**

**CAS: 67-63-0 Propan-2-ol**

WES	STEL: 1230 mg/m <sup>3</sup> , 500 ppm TWA: 983 mg/m <sup>3</sup> , 400 ppm
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**Engineering Controls:**

Maintain air concentration below occupational exposure standards, providing adequate ventilation. Use explosion-proof ventilating equipment.

**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:**

Chemical resistant 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.

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:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Clear, light blue
<b>Odour:</b>	No information available
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	No information available
<b>Melting point/freezing point:</b>	No information available
<b>Initial Boiling Point/Boiling Range:</b>	84 °C
<b>Flash Point:</b>	14.4 °C
<b>Flammability:</b>	Highly flammable.
<b>Auto-ignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	No information available
<b>Upper:</b>	No information available
<b>Vapour Pressure:</b>	No information available
<b>Relative Density at 25 °C:</b>	0.8
<b>Vapour Density:</b>	No information available
<b>Evaporation Rate:</b>	No information available
<b>Solubility in Water:</b>	No information available
<b>Partition Coefficient (n-octanol/water):</b>	4.4 log POW
<b>Viscosity:</b>	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:** Heat, sparks, open flames, hot surfaces and direct sunlight.

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**Incompatible Materials:** Strong oxidising agents, acids, isocyanates and chlorine.**Hazardous Decomposition Products:** Toxic and irritating fumes.

## 11 Toxicological Information

**Toxicity:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:****CAS: 67-63-0 Propan-2-ol**

Oral	LD <sub>50</sub>	5,045 mg/kg (rat)
Dermal	LD <sub>50</sub>	12,800 mg/kg (rabbit)
Inhalation	LC <sub>50</sub> /4 h	30 mg/l (rat)

**CAS: 117704-25-3 Doramectin**

Oral	LD <sub>50</sub>	500-2,000 mg/kg (rat)
Dermal	LD <sub>50</sub>	>2,000 mg/kg (rat)
Inhalation	LC <sub>50</sub> /4 h	0.54 mg/l (rat)

**CAS: 102-71-6 Triethanolamine**

Oral	LD <sub>50</sub>	8,000 mg/kg (rat)
Dermal	LD <sub>50</sub>	20,000 mg/kg (rat)

**Acute Health Effects****Inhalation:** May cause drowsiness and dizziness, headache, nausea and vomiting.**Skin:** May cause skin irritation.**Eye:** Causes serious eye irritation, redness, swelling, blurred vision and lachrymation.**Ingestion:** May be harmful if swallowed.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Causes serious eye irritation.**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:**

Isopropyl alcohol and triethanolamine are classified by IARC as Group 3 - Not classifiable as to its carcinogenicity to humans.

**Reproductive Toxicity:** May cause harm to breast-fed children.**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause drowsiness and dizziness.**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

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

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

Prolonged or repeated skin contact may cause degreasing and drying leading to dermatitis.

Prolonged inhalation may be harmful.

May cause chronic effects to the liver, kidneys and nervous system.

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

The Australian Acceptable Daily Intake (ADI) for doramectin for a human is 0.002 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

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(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2019).

## 12 Ecological Information

**Ecotoxicity:****Aquatic toxicity:**

Harmful to aquatic life with long lasting effects.

**CAS: 67-63-0 Propan-2-ol**

EC <sub>50</sub> /48 h	100 mg/l (daphnia)
EC <sub>50</sub> /72 h	100 mg/l (scenedesmus subspicatus)
LC <sub>50</sub> /96 h	1,400 mg/l (bluegill)
	9,640 mg/l (fathead minnow)
LC <sub>50</sub> /48 h	8,970 mg/l (golden orfe)

**CAS: 117704-25-3 Doramectin**

EC <sub>50</sub> /48 h	0.0001 mg/l (daphnia)
LC <sub>50</sub> /96 h	0.011 mg/l (bluegill)
	0.0051 mg/l (rainbow trout)

**CAS: 102-71-6 Triethanolamine**

EC <sub>50</sub> /48 h	609.98 mg/l (daphnia)
LC <sub>50</sub> /96 h	11,800 mg/l (brachydanio rerio)
	11,800 mg/l (fathead minnow)

**Persistence and Degradability:** Doramectin is biodegradable.**Bioaccumulative Potential:** No further relevant information available.**Mobility in Soil:** Doramectin is tightly binds to soil particles and is not expected to be mobile.**Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

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

## 14 Transport Information

<b>UN Number</b>	
<b>ADG, IMDG, IATA</b>	UN1219
<b>Proper Shipping Name</b>	
<b>ADG, IMDG, IATA</b>	ISOPROPANOL (ISOPROPYL ALCOHOL)
<b>Dangerous Goods Class</b>	
<b>ADG Class:</b>	3 Flammable liquids.
<b>Packing Group:</b>	
<b>ADG, IMDG, IATA</b>	II
<b>EMS Number:</b>	F-E,S-D
<b>Hazchem Code:</b>	•2YE

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**Limited Quantities:** 1L

**Packagings & IBCs - Packing Instruction:** P001, IBC02

**Portable Tanks & Bulk Containers - Instructions:** T4

**Portable Tanks & Bulk Containers - Special Provisions:** TP1

## 15 Regulatory Information

### Australian Inventory of Chemical Substances:

CAS: 67-63-0	Propan-2-ol
CAS: 102-71-6	Triethanolamine

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**  
Not Scheduled.

## 16 Other Information

**Date of Preparation or Last Revision:** 30.08.2019**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)

### Abbreviations and acronyms:

ADG: Australian Dangerous Goods  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 LC<sub>50</sub>: Lethal concentration, 50 percent  
 LD<sub>50</sub>: 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)  
 Flammable Liquids 2: Flammable liquids – Category 2  
 Acute Toxicity (Oral) 4: Acute toxicity – Category 4  
 Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2  
 Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A  
 Toxic To Reproduction - Lact.: Reproductive toxicity – effects on or via lactation  
 Toxic To Reproduction 2: Reproductive toxicity – Category 2  
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
 Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1  
 Aquatic Acute 3: Hazardous to the aquatic environment, short-term (Acute). Category 3  
 Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1  
 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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