



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	Rumenox 200 Premix
Manufactures Product Code:	R-200P
Pack Size:	25kg
Product Use:	An in-feed premix for prevention of coccidiosis in poultry and cattle. For improved feed efficiency in cattle and increased milk protein production in dairy cattle. As an aid in the control of ketosis, and an aid in the reduction of bloat in cattle.
Restrictions of Use:	Refer to section 15.
New Zealand Supplier/Mfg:	Glenmark Veterinary Limited
Address:	296 Glenmore Road Junction, Albany 0793 Auckland
Telephone:	0800 485 123
Website:	glenmarkvet.com
Emergency Telephone:	0800 764 766 (poison line)
Date of SDS Preparation:	30 September 2019

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: HSR002317

Pictograms:



Acutely Toxic



Corrosive



Ecotoxic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1C (oral)	H301	Toxic if swallowed.	Category 3
6.3B	H316	Causes mild skin irritation.	Category 3
6.5B	H317	May cause an allergic skin reaction.	Category 1
8.3A	H318	Causes serious eye damage.	Category 1
9.1D	H401	Toxic to aquatic life.	Category 4
9.2D	H423	Harmful to the soil environment.	-
9.3A	H431	Very toxic to terrestrial vertebrates.	-

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P104	Read safety data sheet before use
P261	Avoid breathing dust.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	
P273	Avoid release to the environment.
P280	Wear protective clothing.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Dispose according to label instructions, or at an approved landfill or other approved facility. It is not proposed to refill or reuse the empty containers. Cleaned empty containers may be offered for recycling or buried in a landfill after crushing or puncturing.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Sodium monensin	20%	22373-78-0
Diluent	65-80%	Proprietary
Anti-dusting oil	1-3%	Proprietary

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical assistance if needed
If on Skin	IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs seek medical assistance
If Swallowed	IF SWALLOWED: Rinse mouth. Never give anything to the mouth of an unconscious person. Immediately call a POISON CENTER or physician
If Inhaled	Move to fresh air. Seek medical assistance if needed.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	Toxic if swallowed.
Inhalation:	No data
Skin:	Causes mild skin irritation. May cause an allergic skin reaction.
Eye:	Causes serious eye damage.

Section 5. Fire Fighting Measures

Hazard Type	Acutely Toxic
Hazards from decomposition products	May emit toxic fumes when exposed to heat or fire.
Suitable Extinguishing media	Water, carbon dioxide, dry chemical, foam or halon
Precautions for firefighters and special protective clothing	Protective clothing suitable for chemical or agrichemical fire including self-contained breathing apparatus.
HAZCHEM CODE	2X

Section 6. Accidental Release Measures

Ensure spill response personnel have adequate protective gloves, goggles and dust filter mask.

Vacuum material with appropriate dust collection filter in place. Be aware of potential for dust explosion when using electrical equipment. If vacuum is not available, lightly mist material and remove by sweeping or wet wiping.

Transfer to a waste container labelled as "Hazardous Waste". Dispose of to an approved landfill. Large spills due to traffic accidents, etc., should be reported immediately to the HAZMAT Fire service team by dialling 111. Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes.

Section 7. Handling and Storage

Approved Handlers

Not required per EPA Approval Code: HSR002317

Precautions for safe handling:

Keep out of reach of children. Read safety data sheet or label before use. Avoid breathing in dust. Wash hands thoroughly after use. Do not eat, drink or smoke when using this product. Wear protective clothing. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment

Conditions for safe storage:

This substance, in any quantity, must be secured while not in use so that a person who should not have access to this substance cannot access the substance. Store securely in a cool dry place below 30°C. Do not store with incompatible materials such as strong oxidizing agents (e.g., peroxides, permanganates, nitric acid, etc).

Section 8 Exposure Controls / Personal Protection

Exposure limits or guidelines:	Monensin sodium:	LEG 15 µg/m ³ TWA (12h)
	Grain dust:	PEL 10 mg/m ³ TWA TLV 4mg/m ³ TWA (8h or 12h total)
	Limestone dust:	PEL 5 mg/m ³ TWA (respirable) and 15 mg/m ³ TWA (total) TLV 10 mg/m ³ TWA

The anti-dusting oil reduces potential exposure under normal conditions of use.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

Engineering Controls: In a manufacturing setting, wear chemical- resistant gloves and body covering to minimize skin contact. If handled in a ventilated enclosure, as in a laboratory setting, respirator and goggles or face shield may not be required. Safety glasses are always required.

Personal Protective Equipment: In a manufacturing setting, use protective clothing, impervious gloves, and dust respirator. Chemical goggles and/or face shield. Under normal use and handling conditions, wear goggles to protect eyes and wear impermeable gloves and protective equipment to avoid direct contact with skin. Wash thoroughly with soap and water after handling.

Precautions: Do not feed undiluted to animals.
Do not allow dogs, horses or other equines access to feeds containing monensin sodium. Ingestion of monensin sodium by horses has been fatal.
The feeding of undiluted premix or feeds containing high concentrations of monensin sodium (mixing errors) could be fatal to cattle. Monensin sodium-medicated feed is safe at approved dosages for use in approved species only. Consumption by unapproved species may result in toxic reactions.

Section 9 Physical and Chemical Properties

Appearance	Solid, Brown, Granular meal
Odour	Musty
Odour Threshold	Not available
pH	Not applicable
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Minimum Ignition Temperature of Dust Layer	300°C (572°F) for Rumensin 80 (18% formulation); 190°C (374°F) for Rumensin 60 (13% formulation)
Upper and Lower Explosive Limits	No ignition up to 1.05 oz/cu ft
Vapour Pressure	Not available
Vapour Density	Not available

Relative Density	Not available
Solubilities	Insoluble
Partition Coefficient:	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not applicable

Section 10. Stability and Reactivity

Chemical Stability	Stable under normal storage and use conditions
Conditions to Avoid	None known.
Incompatibility	May react with strong oxidizing agents (e.g., peroxides, permanganates, nitric acid, etc.).
Hazardous Decomposition Products	May emit toxic fumes when heated to decomposition. The product will not polymerise.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Toxic if swallowed. 24% Monensin sodium mixture: = Rat, LD50 estimated greater than 200mg/kg, mortality. Rumenox In-Feed: = Rat, LD50 314 mg/kg, reduced activity, incoordination.
Dermal	Not applicable. 24% Monensin sodium mixture: = Rabbit, 500 mg/kg, no deaths or toxicity
Inhalation	Not applicable. 24% Monensin sodium mixture: Rat, 370 mg/m ³ for 1 hour, no deaths.
Eye	Causes serious eye damage.
Skin	Causes mild skin irritation. May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological Information

HSNO Classifications:

9.1D = Toxic to aquatic life.
9.2D = Harmful to the soil environment.
9.3A = Very toxic to terrestrial vertebrates.

Environmental Precautions: This product is particularly toxic to horses and dogs and fish

Ecotoxicity Data:

Toxicity to fish

Monensin Sodium

LC50 / 96 h / *Oncorhynchus mykiss* (rainbow trout): 9.0 mg/l

LC50 / 96 h / *Lepomis macrochirus* (Bluegill sunfish): 16.6 mg/l

Toxicity to algae

Monensin Sodium

EC50 / 72 h / *Selenastrum capricornutum*: 4.33 mg/l
(average specific growth rate) NOEC / *Selenastrum capricornutum*: 0.055 mg/l (biomass)

Toxicity to daphnia

Monensin Sodium

EC50 / 48 h/ *Daphnia magna* (Water flea) : 10.7 mg/l

Toxicity to Birds

Monensin sodium

Bobwhite 14-day oral median lethal dose: 85.7 mg/kg

Bobwhite 5-day dietary median lethal concentration: 1090 ppm

Mallard 5-day dietary median lethal concentration: > 5000 ppm

Toxicity to Soil Organisms

Earthworm 14-day median lethal concentration: >264.2 mg/kg

Phytotoxicity 14 species: moderate injury at 4 to 8 mg/kg

Phytotoxicity median effective concentration:

oats - 12.9 mg/kg (growth), radish ->4.347 mg/kg(growth), mungbean - 32.9 mg/kg (emergence)

Environmental Fate:

Soil degradation half-life (days): 7.5

Greater than 50% loss in sandy, silt, and clay loam soils in less than 14 days

Soil adsorption coefficient (log Koc): >5.63 (pH 4.5, 6)

Bioconcentration factor (calculated): 72.4

Section 13. Disposal Considerations

Dispose unused or contaminated product at an approved landfill or other approved facility. It is not proposed to refill or reuse the empty containers. Cleaned empty containers may be offered for recycling or buried in a landfill after crushing or puncturing.

Section 14 Transport Information

Classified as a Dangerous Good for Road Transport according to NZS5433:2012

Road and Rail Transport

UN No 3249

Class-primary 6

Packing Group III

Proper Shipping Name: Medicine, Solid, Toxic, N.O.S (monensin sodium)

Marine Transport

UN No 3249

Class-primary 6

Packing Group III

Proper Shipping Name: Medicine, Solid, Toxic, N.O.S (monensin sodium)

Marine toxin yes

Air Transport

UN No 3249

Class-primary 6

Packing Group III

Proper Shipping Name: Medicine, Solid, Toxic, N.O.S (monensin sodium)

Transport Pictogram



Section 15 Regulatory Information

EPA Approval Code: HSR002317
 HSNO Controls: HSNO Controls: see www.epa.govt.nz for controls
 Trigger quantities for this substance:

	Trigger Quantity
Certified Handler	Not Required (as per HSR002317 controls)
Location Certificate	Not applicable
Tracking Trigger Quantities	Not required (as per HSR002317 controls)
Signage Trigger Quantities	1000 kg (EPA Controls 6.1C)
Emergency Response Plan trigger Quantities	1000 kg (EPA Controls 6.1C)

Section 16 Other Information

Glossary

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been compiled by TCC on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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Please contact the New Zealand proprietor, Glenmark Veterinary Limited, if further information is required.

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