

Safety Data Sheet

Dairy Cow Minerals™

Revised: 7/08/2019

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name: DAIRY COW MINERALS™

Product Code: 8290010

Recommended Use: A multi-mineral product for dairy cattle
Restrictions of Use: Refer to Section 15

Company Identification: Ravensdown Limited
Address: 292 Main South Road, Hornby
 PO Box 1049
 Christchurch

Customer Centre: 0800 100 123

National Poisons Information Centre: 0800 POISON (0800 764 766)

Emergency Telephone Number: 0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)

Transport Emergency Phone: 111 - tell operator what service is needed: Fire, Ambulance, Police

Section 2: HAZARD IDENTIFICATION

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

EPA Approval No: Animal Nutritional and Animal Care Products – HSR002521

Pictograms



Toxic/ Irritant



Chronic



Corrosive



Ecotoxic

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1D (oral)	H302	Harmful if swallowed.	Acute Tox. 4
6.3A	H315	Causes skin irritation.	Skin Irrit. 2
6.5A	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	Resp. Sens. 1
6.5B	H317	May cause an allergic skin reaction.	Skin Sens. 1
6.7B	H351	Suspected of causing cancer.	Carc. 2
6.8B	H361	Suspected of damaging fertility or the unborn child.	Repr. 2
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	STOT RE 2
8.3A	H318	Causes serious eye damage.	Eye Corr. 1
9.1A	H410	Toxic to aquatic life with long lasting effects.	Aquatic Chronic 1

9.2C	H423	Harmful to the soil environment.	
9.3C	H433	Harmful to terrestrial vertebrates.	

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing as per Section 8.
P281	Use personal protective equipment as required.
P285	In case of inadequate ventilation wear respiratory protection.

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.
P362	Take off contaminated clothing and wash before re-use.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position 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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3: COMPOSITION INFORMATION

INGREDIENT	CAS No.	CONTENT
Magnesium Sulphate Trihydrate	15320-30-6	40-45 %
Zinc Sulphate Monohydrate	7446-19-7	30-35%
Copper Sulphate Pentahydrate	7758-98-7	15-20%
Cobalt Sulphate Heptahydrate	10026-24-1	0.3-1 %
Calcium Iodate	7789-80-2	0.2 .0.5%
Aniseed flavouring	Proprietary	0.10-0.30 %
Sodium Selenate Anhydrous	13410-01-0	0.10-0.15%

Section 4: FIRST AID MEASURES

First Aid Measures:

Consult the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor immediately in every case of suspected poisoning.

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.
Ingestion:	Never give anything by mouth to an unconscious person. If swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre on 0800 POISON (0800 764 766). Seek medical assistance immediately.
Skin:	Remove contaminated clothing and wash affected area thoroughly with soap and water. If a large area is affected seek medical assistance.
Eye:	Flush with plenty of water for 15 minutes holding eyelids open if necessary. Call a doctor immediately.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	Harmful if swallowed. Ingestion of large quantities may lead to vomiting, abdominal pain, dizziness, convulsions, shock, coma, and possible death.
Inhalation:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause coughing, shortness of breath, nausea.
Skin:	Causes skin irritation. May cause an allergic skin reaction.
Eye:	Causes serious eye damage.
Chronic:	Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Advice to Doctor:	No specific antidote. Treat symptomatically. If vomiting is induced, suggest endotracheal and/or oesophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.
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Section 5: FIRE FIGHTING MEASURES

Flash Point:	Not applicable (non-flammable)
Combustion Products:	Decomposes on heating emitting toxic fumes, including those of oxides of copper, and oxides of sulphur.
Extinguishing Media:	Based on surrounding materials
Protective Equipment:	Breathing apparatus plus protective gloves
HAZCHEM Code:	2Z

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal:	Wear appropriate protective clothing. Exclude non-essential people from the area. Contain spill and absorb with inert material such as soil, sand or absorbent granules and place in a sealable waste container. Dispose of waste safely in an approved landfill.
Protective Clothing:	For appropriate personal protective equipment see section 8.
Environmental Precaution:	Prevent from entering drains, waterways or sewers. If spill does enter waterways contact the local authority.

Section 7: HANDLING AND STORAGE

Handling:	Keep out of reach of children. Avoid contact with skin, eyes and inhalation of vapours. Read label before use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work
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clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective clothing as per Section 8. Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection.

Storage: Store away from incompatible materials listed in Section 10. Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertiliser and seed. Store in accordance with NZS 8409; Management of Agrichemicals. This product is subject to signage when stored in quantities of 100 kg or more, either alone or in aggregate with substances of the same hazard classification. Storage of more than 100 kg requires emergency response plans. For full details refer to NZS 8409; Management of Agrichemicals and HSNO Regulations (Emergency Management and Identification Regulations).

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

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm mg/m3	STEL ppm mg/m3
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No ingredients have exposure limits

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: 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 dust. Keep containers closed when not in use.

Protective Equipment: Wear overalls, full face shield, elbow-length impervious gloves, splash apron and rubber boots. Use with adequate ventilation. If inhaled risk exists, wear air-supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

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 AND CHEMICAL PROPERTIES

Appearance	Powder
Colour	Light blue
Odour	Slight odour
Odour Threshold	Not applicable
pH	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Non flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	1.95

Water Solubility	Soluble (approx 200g per litre at room temperature)
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10: STABILITY AND REACTIVITY

Stability:	Stable under normal conditions. When stored appropriately this product should show no significant degradation for at least 5 years from the date of manufacture.
Hazardous Polymerisation:	Hazardous polymerisation is not likely to occur
Hazardous Decomposition Products:	Sulphur oxides and copper oxides
Conditions to Avoid:	Moisture and heat; releases water of crystallisation when heated
Materials to Avoid:	Avoid contact with strong acids. Incompatible with finely powdered metals, hydrazine, hydroxylamine, magnesium, nitro methane, steel and air.

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Swallowed	Harmful if swallowed. Ingestion of large quantities may lead to vomiting, abdominal pain, dizziness, convulsions, shock, coma, and possible death.
Dermal	Not applicable.
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause coughing, shortness of breath, nausea.
Eye	Causes serious eye damage.
Skin	Causes skin irritation. May cause an allergic skin reaction. May cause dermatitis.

Chronic Effects:

Carcinogenicity	Suspected of causing cancer.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	May cause damage to organs through prolonged or repeated exposure. May be harmful to the cardiovascular, alimentary, hepatic and renal systems.

Ingestion:	No LD50 data available for the product however for:	
	Sodium Selenate	Oral LD50 (rat) 25mg/kg
	Copper Sulphate	Oral LD50 (rat) 300mg/kg
	Cobalt Sulphate	Oral LD50 (rat) 582mg/kg
	Zinc Sulphate Monohydrate	Oral LD50 (rat) 1,710 mg/kg

Section 12: ECOLOGICAL INFORMATION

Hazard Classifications:	9.1A = Toxic to aquatic life with long lasting effects. 9.2C = Harmful to the soil environment. 9.3C = Harmful to terrestrial vertebrates.
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Product:	
Persistence and degradability	No data available
Bioaccumulation	Bioaccumulation unlikely to occur
Mobility in Soil	No data available

Other adverse effects	No data available
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Do not allow to enter waterways.

Section 13: DISPOSAL INFORMATION

Product Disposal: Dispose of product only by using according to label or at an approved landfill. Recycle where possible. Do not contaminate bodies of water with chemical or empty container.

Container Disposal: Burn container in an appropriate incinerator if circumstance, such as wind direction permit. Otherwise bury in an approved landfill. Do not use container for any other purpose.

Section 14: TRANSPORT INFORMATION

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012



Road, Rail, Sea and Air Transport

UN No	3077
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper sulphate pentahydrate)
Marine Pollutant	Yes
Special Provisions	If the product's individual container is below 5kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Transport Information: It is good practice to separate this product from food, food related materials, animal feedstuffs, seed or fertilisers during transport.

Section 15: REGULATORY INFORMATION

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

EPA Approval No: Animal Nutritional and Animal Care Products – HSR002521

HSNO Classification: 6.1D(oral), 6.3A, 6.5A, 6.5B, 6.7B, 6.8B, 6.9B, 8.3A, 9.1A, 9.2C, 9.3C

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	100kg(9.1A)
Emergency Response Plan	100kg (9.1A)
Secondary Containment	100kg (9.1A)
Restriction of Use	Only use for the intended purpose.
ACVM	Exempt from Registration under the ACVM Act 1997

Section 16: OTHER INFORMATION

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	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

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Please contact the New Zealand distributor, if further information is required.

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