


## Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

<b>Product Name:</b>	<b>CAN</b>
<b>Product Code:</b>	4200000
<b>Recommended Use:</b>	Fertiliser
<b>Restrictions of Use:</b>	Refer to Section 15
<b>Company Identification:</b>	Ravensdown Limited
<b>Address:</b>	292 Main South Road, Hornby, Christchurch 8042 PO Box 1049, Christchurch 8011
<b>Customer Centre:</b>	0800 100 123
<b>National Poisons Information Centre:</b>	0800 POISON (0800 764 766)
<b>Emergency Phone Number:</b>	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
<b>Transport Emergency Phone Number:</b>	111 - tell operator what service is needed: Fire, Ambulance or Police
<b>Date of SDS Preparation</b>	13 August 2020

## Section 2: HAZARD IDENTIFICATION

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

<b>EPA Approval No:</b>	Fertilisers (subsidiary) – HSR002571
<b>Pictograms:</b>	
<b>Signal Word:</b>	<b>Warning</b>

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
9.1D	H413	May cause long lasting harmful effects to aquatic life.	Aquatic Chronic 4

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
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.
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<b>Storage Code</b>	<b>Storage Statement</b>
None allocated	

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Dispose of according to Local Regulations or Authorities

### Section 3: COMPOSITION INFORMATION

INGREDIENT	CAS No.	CONTENT
Ammonium Nitrate	6484-52-2	<80%
Calcium carbonate	471-34-1	>20%

### Section 4: FIRST AID MEASURES

<b>Routes of Exposure:</b>	
<b>If in eyes:</b>	Flush with plenty of water for several minutes, holding eyelids open if necessary. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>If on skin:</b>	Wash skin with plenty of water. If skin irritation occurs: Get medical advice/ attention.
<b>If ingested:</b>	Never give anything by mouth to an unconscious person. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>If inhaled:</b>	Remove patient to fresh air. Keep at rest in comfortable position for breathing. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance if needed.
<b>Most important symptoms and effects, both acute and delayed</b>	
<b>Symptoms:</b>	
<b>Eyes:</b>	Causes serious eye irritation. Exposure to dusts may result in irritation, pain and lachrymation (tears).
<b>Skin:</b>	Not applicable. Prolonged and repeated skin exposure may result in irritation, redness, itching and pain.
<b>Ingested:</b>	May be harmful if swallowed. Ingestion of large quantities may lead to dizziness, nausea, vomiting, diarrhea and abdominal cramps, convulsions and collapse. Acute poisoning is rare but may cause gastric disorders and anemia. In some circumstances conversion of nitrates of nitrites may occur in the stomach of some individuals (methaemoglobinaemia). Nitrite exposure can lead to nausea, vomiting, dizziness, rapid heartbeat, irregular breathing, convulsions or coma.
<b>Inhaled:</b>	Elevated exposure may result in mucous membrane irritation (nose and throat) and shortness of breath.
<b>Chronic:</b>	Chronic oral doses of nitrate may cause weakness, depression, headache and mental impairment.
<b>Notes to Doctor:</b>	Treat symptomatically.

### Section 5: FIRE FIGHTING MEASURES

<b>Hazard Type</b>	Non Flammable
<b>Hazards from combustion products</b>	Ammonia, Nitrogen Oxides, Carbon Dioxide
<b>Suitable Extinguishing media</b>	Based on surrounding materials Use water fog to cool intact containers.
<b>Precautions for firefighters and special protective clothing</b>	Full protective equipment including SCBA. Contact with combustible materials may cause fire. Will assist combustion.
<b>HAZCHEM CODE</b>	None allocated

### Section 6: ACCIDENTIAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures:</b>
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Wear approved protective clothing as detailed in Section 8. Evacuate all non-essential personnel from affected area. Ensure adequate ventilation.

**Environmental precautions:**

Avoid release to the environment. Do not allow into drains or water courses.

**Methods and material for containment and cleaning up:**

Contain spill and sweep up. Collect and place in sealable containers. Avoid generating dust. Reuse or recycle where possible. Wash contaminated area with water. Dispose according to Section 13.

**Section 7: HANDLING AND STORAGE**

<b>Handling:</b>	<p>Read label before use.                  Wash hands thoroughly after handling.                  Avoid release to the environment.                  Wear protective clothing as detailed in Section 8.                  Avoid dust formation.                  Ensure good ventilation of the work station.                  Avoid contact with eyes.</p>
<b>Storage:</b>	<p>Keep out of reach of children.                  Store in closed containers in cool dry well-ventilated area.                  Store away from combustible, organic or other readily oxidised materials, chloride salts or metal oxides.</p>

**Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION**


**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Calcium carbonate [471-34-1]	-	10	-	-

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 2019 11<sup>TH</sup> EDITION.

<b>ammonium nitrate (6484-52-2)</b>	
<b>DNEL/DMEL (workers)</b>	
Long-term - systemic effects, dermal	5.12 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	2.56 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8.9 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	2.56 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
PNEC aqua (intermittent, freshwater)	4.5 mg/l
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	18 mg/l

<b>Engineering Controls:</b>	If dusts are generated use local extraction ventilation to control.
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<b>Personal Protection Equipment:</b>	
	
<b>Eyes:</b>	Chemical goggles.
<b>Skin/Hands:</b>	Chemically resistant protective gloves. EN 374. Choosing the proper glove is a decision

	that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Wear suitable protective clothing.
<b>Respiratory:</b>	In case of inadequate ventilation wear respiratory protection. Filter type: P1
<b>General:</b>	Do not eat, drink or smoke when using this product. Do not breathe dust. Wash hands before breaks and after work. Avoid contact with skin and eyes.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Granular
<b>Colour</b>	White/Gray
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	~7 (100g/l @20°C)
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Product is not flammable.
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Bulk Density</b>	1030 kg/m <sup>3</sup>
<b>Water Solubility</b>	Mostly Soluble
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Decomposes above 170°C
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available

### Section 10: STABILITY AND REACTIVITY

<b>Stability of Substance</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Decomposes rapidly under extreme heat (>170°C). Do not overheat.
<b>Conditions to Avoid</b>	Ignition sources, strong heat.
<b>Incompatible Materials</b>	Combustible materials, chloride salts, metal oxides, oxidisable substances, metallic powders, acids, alkalis, organic substances.
<b>Hazardous Decomposition Products</b>	Ammonia, nitrogen oxides, carbon dioxide.

### Section 11: TOXICOLOGICAL INFORMATION

**Acute Effects:**

<b>Swallowed</b>	May be harmful if swallowed. Ingestion of large quantities may lead to dizziness, nausea, vomiting, diarrhea and abdominal cramps, convulsions and collapse. Acute poisoning is rare but may cause gastric disorders and anemia. In some circumstances conversion of nitrates of nitrites may occur in the stomach of some individuals (methaemoglobinaemia). Nitrite exposure can lead to nausea, vomiting, dizziness, rapid heartbeat, irregular breathing, convulsions, coma
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not triggered however elevated exposure may result in mucous membrane irritation (nose and throat) and shortness of breath.
<b>Eye</b>	Causes serious eye irritation. Exposure to dusts may result in irritation, pain and lachrymation (tears).

<b>Skin</b>	Not applicable. Prolonged and repeated skin exposure may result in irritation, redness, itching and pain.
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**Chronic Effects:**

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.
<b>Other</b>	Chronic oral doses of nitrate may cause weakness, depression, headache and mental impairment.

**Individual component information:**

**Acute Toxicity:**

<b>Chemical Name</b>	<b>Oral – LD50</b>	<b>Dermal – LD50</b>	<b>Inhalation – LC50</b>
Ammonium Nitrate (6484-52-2)	2950 mg/kg (rat)	>5000 mg/kg (rat)	>88.8 mg/l/4h (rat)

**Section 12: ECOLOGICAL INFORMATION**

HSNO Classes: 9.1D= May cause long lasting harmful effects to aquatic life.

<b>Product:</b>	
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

**Individual component information (Please refer to [www.epa.govt.co.nz](http://www.epa.govt.co.nz) for full details):**

**Ammonium Nitrate (6484-52-2)**

<b>Route</b>	<b>Species</b>	<b>Duration</b>	<b>Value LC50/EC50</b>
EC50 Daphnia 1	Daphnia Magna	48 hr	>490 mg/L
EC50 other aquatic organisms 1	Cyprinus carpio (Common carp)	48 hr	447 mg/L
Aquatic, Algal	Algae	10 d	1700 mg/L

Do not allow to enter waterways.

**Section 13: DISPOSAL INFORMATION**

<b>Disposal Method:</b>	Collection into sealable containers and dispose of in an appropriate land fill. Reuse or recycle where possible. If practicable apply excess fertiliser at recommended rates to appropriate land. Observe any local authority restrictions that may apply.
<b>Container Disposal:</b>	Rinse containers thoroughly prior to reuse. Otherwise render unusable and dispose of as waste.
<b>Precautions or methods to avoid:</b>	Do not allow to enter waterways.

**Section 14: TRANSPORT INFORMATION**

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

**Section 15: REGULATORY INFORMATION**

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

<b>EPA Approval Code:</b>	Fertilisers (subsidiary) – HSR002571
<b>HSNO Classification:</b>	6.1E(dermal), 6.4A, 9.1D

<b>HSW (HS) Regulations 2017 and EPA Notices</b>	<b>Trigger Quantity</b>
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Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	10 000kg (9.1D)
Emergency Response Plan	10 000kg (9.1D)
Secondary Containment	10 000kg (9.1D)
Restriction of Use	Only use for the intended purpose.

## Section 16: OTHER INFORMATION

### Glossary

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	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 prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd 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 (NZ) have 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 (NZ) Ltd accept 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 Ravensdown, if further information is required.

Issue Date: 13 August 2020

Review Date: 13 August 2025