


CAN**Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER**

Product Name:	Calcium Ammonium Nitrate (CAN)
Product Code:	4200000
Recommended Use:	Fertiliser
Restrictions of Use:	Refer to Section 15
Company Identification:	Ravensdown Limited
Address:	292 Main South Road, Hornby, Christchurch 8042 PO Box 1049, Christchurch 8011
Customer Centre:	0800 100 123
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Phone Number:	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
Transport Emergency Phone Number:	111 - tell operator what service is needed: Fire, Ambulance or Police
Date of SDS Preparation	17 July 2025 v2

Section 2: HAZARD IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No:	Fertilisers (subsidiary) – HSR002571
Pictograms:	
Signal Word:	Warning

GHS Classification and Category	Hazard Code	Hazard Statement
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Hazardous to the aquatic environment chronic Cat. 4	H413	May cause long lasting harmful effects to aquatic life.

Prevention Code	Prevention Statement
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
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.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
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

Routes of Exposure:	
If in eyes:	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.
If on skin:	Wash skin with plenty of water. If skin irritation occurs: Get medical advice/ attention.
If ingested:	Never give anything by mouth to an unconscious person. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
If inhaled:	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.
Most important symptoms and effects, both acute and delayed	
Symptoms:	
Eyes:	Causes serious eye irritation. Exposure to dusts may result in irritation, pain and lachrymation (tears).
Skin:	Not applicable. Prolonged and repeated skin exposure may result in irritation, redness, itching and pain.
Ingested:	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.
Inhaled:	Elevated exposure may result in mucous membrane irritation (nose and throat) and shortness of breath.
Chronic:	Chronic oral doses of nitrate may cause weakness, depression, headache and mental impairment.
Notes to Doctor:	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

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

Section 6: ACCIDENTIAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

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

Handling:	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.
Storage:	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.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm mg/m ³	STEL ppm mg/m ³
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 (WES-STEL). 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 FEB 2025 15TH EDITION.

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

Engineering Controls:	If dusts are generated use local extraction ventilation to control.
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Personal Protection Equipment:



Eyes:	Chemical goggles.
Skin/Hands:	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.
Respiratory:	In case of inadequate ventilation wear respiratory protection. Filter type: P1
General:	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

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

Section 10: STABILITY AND REACTIVITY

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

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Swallowed	Not triggered however if ingested in large quantities it 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
Dermal	Not applicable.
Inhalation	Not triggered however elevated exposure may result in mucous membrane irritation (nose and throat) and shortness of breath.
Eye	Causes serious eye irritation. Exposure to dusts may result in irritation, pain and lachrymation (tears).
Skin	Not applicable. Prolonged and repeated skin exposure may result in irritation, redness, itching and pain.

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.
Other	Chronic oral doses of nitrate may cause weakness, depression, headache and mental impairment.

Individual component information:**Acute Toxicity:**

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

Section 12: ECOLOGICAL INFORMATION

May cause long lasting harmful effects to aquatic life.


Product:	
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Individual component information (Please refer to www.epa.govt.co.nz for full details):**Ammonium Nitrate (6484-52-2)**

Route	Species	Duration	Value LC50/EC50
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

Disposal Method:	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.
Container Disposal:	Rinse containers thoroughly prior to reuse. Otherwise render unusable and dispose of as waste.
	
Precautions or methods to avoid:	Do not allow to enter waterways.

Section 14: TRANSPORT INFORMATION

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020

Section 15: REGULATORY INFORMATION

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020	
EPA Approval Code:	Fertilisers (subsidiary) – HSR002571

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	10 000kg
Emergency Response Plan	10 000kg
Secondary Containment	10 000kg
Restriction of Use	Only use for the intended purpose.

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 FEB 2025 15th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
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.

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