

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Calcium Ammonium Nitrate (CAN) Granular Grade**
 Item Code:
 Product Use: Fertiliser
 Restriction of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd
 Address: 10 Firth Street
 Drury, 2113

Telephone: +64 9 294 8453
 Fax Number: +64 9 294 7272

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 9 October 2020

Section 2. Hazards Identification

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

EPA Approval No: Fertiliser (subsidiary) – HSR002571

Pictograms



Irritant

Signal Word: **Warning**

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	H401	Toxic 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.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Code	Storage Statement
None allocated	

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

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Ammonium nitrate	>=70 - <80	6484-52-2
Calcium carbonate	≥20 - <20	471-34-1

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If on Skin	Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation continues seek medical advice.
If Swallowed	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Seek medical advice if needed.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:	Refer to Section 11
Ingestion:	May be harmful if swallowed.
Inhalation:	Not applicable.
Skin:	Not applicable.
Eyes:	Causes severe eye irritation.

Treatment:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
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Section 5. Fire Fighting Measures

Hazard Type	Non Flammable, Non-combustible material.
Hazards from decomposition products	Decomposition products may include the following materials: nitrogen oxides Avoid breathing dusts, vapors or fumes from burning materials. In case of inhalation of decomposition products in a fire, symptoms may be delayed.
Suitable Extinguishing	Use flooding quantities of water for extinction. Do NOT use chemical extinguisher or foam or attempt to smother the

media	fire with steam or sand.
Precautions for firefighters and special protective clothing	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves)
HAZCHEM CODE	None allocated

Section 6. Accidental Release Measures

Wear appropriate protective clothing. Exclude non-essential people from the area. Do not touch or walk through spilled material

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Small spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose as per Section 13.

Large spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
- Workers should wash hands and face before eating, drinking and smoking.
- Remove contaminated clothing and protective equipment before entering eating areas.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Keep out of reach of children.
- Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink.
- Keep container tightly closed and sealed until ready for use.
- Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
- Do not store in unlabeled containers.
- Use appropriate containment to avoid environmental contamination.
- Keep away from: organic materials, oil and grease.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance		TWA		STEL	
		ppm	mg/m ³	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 (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

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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 11TH EDITION.

Engineering Controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal Protection Equipment



Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
General	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering.

Section 9 Physical and Chemical Properties

Appearance	Solid
Colour	Gray
Odour	Odourless
Odour Threshold	Not available
pH	> 4.5 [Conc. (% w/w): 100 g/l]
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	The product is not flammable.
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Bulk Density	1,000 kg/m ³
Water Solubility	> 100 g/l
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Size	Not available

Section 10. Stability and Reactivity

Stability of Substance	This material is stable when stored and used as directed.
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Hazardous Reactions	No dangerous reaction known under conditions of normal use
Conditions to Avoid	Avoid contamination by any source including metals, dust and organic materials.
Incompatible Materials	Alkalis combustible materials reducing materials organic materials acids
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological Information

Acute Effects:

Swallowed	May be harmful if swallowed.
Dermal	Not applicable
Inhalation	Not applicable
Eye	Causes severe eye irritation.
Skin	Not applicable

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.

Individual component information as per EPA NZ CCID:

Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Ammonium nitrate	2217 mg/kg (rat)	-	-

Section 12. Ecotoxicological Information

HSNO Classes: 9.1D = Harmful to aquatic life.

Persistence and degradability	Not relevant for inorganic substances.
Bioaccumulation	No data available.
Mobility in Soil	No data available.
Other adverse effects	No data available.

Components:

Toxicity

Product / ingredient name	Result	Species	Exposure	References
Ammonium nitrate				
	Acute LC50 447 mg/l Fresh water	Fish - Fish	48 h	IUCLID 5
	Acute EC50 490 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h	IUCLID 5
	Acute EC50 1,700 mg/l Salt water	Aquatic plants - Algae	10 d	IUCLID 5

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Empty the bag by shaking to remove as much as possible of its contents. Empty bags may be disposed of as non-hazardous material or returned for recycling.

Precautions or methods to avoid: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14	Transport Information
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This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Section 15	Regulatory Information
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EPA Approval Code: Fertiliser (Subsidiary) – HSR002571

HSNO Classification: 6.1E(oral), 6.4A, 9.1D

HSWA & EPA Controls	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000 L (9.1D)
Emergency Response Plan	10 000L (9.1D)
Secondary Containment	10 000L (9.1D)
Restriction of Use	None

Section 16	Other Information
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Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
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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