

SAFETY DATA SHEET

Campbells Calcium Nitrate Greenhouse Grade (NitroCal)

Date of Issue: December 2016

1. IDENTIFICATION

Product Identifier: Campbells Calcium Nitrate Greenhouse Grade (NitroCal)

Other Means of Identification:

Recommended Use of the Chemical and Restrictions on Use: Fertiliser

Details of Manufacturer or Importer: Campbells Fertilisers Australasia
18 Raymond Road, Laverton North, Victoria, 3026
Phone: (03) 9931 2211
Fax: (03) 9931 2201
www.campbellsfert.com.au

Emergency Telephone Number: (03) 9931 2211 (business hours only 8.30 am to 5.00 pm)
0418 350 726 (after business hours)
Poisons Information Centre 13 11 26

2. HAZARD(S) IDENTIFICATION

GHS Classification: Not classified as hazardous according to Safe Work Australia (HCIS).

Classification as dangerous according to the Regulation (EC) No 1272/2008 of the European parliament and of the council, on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006



H302 Harmful if swallowed.
H318 Causes serious eye damage
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a Poison Centre 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.

ADG Based on available information, not classified as a Dangerous Good



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Classification: under the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

SUSMP Classification: Not scheduled

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component:	CAS Number:	Proportion (%w/w):
Nitric acid, ammonium calcium salt	15245-12-2	< 85
Calcium nitrate	13477-34-4	< 15

4. FIRST AID MEASURES

Description of Necessary First Aid Measures:

Inhalation: Remove casualty to fresh air. If breathing is difficult, give oxygen as needed. Seek medical attention.

Skin Contact: Remove contaminated clothing. Flush affected area with plenty of water. If irritation persists, seek medical attention.

Eye Contact: Immediately flush eyes with plenty of water holding eyelids open. If irritation persists, seek medical attention.

Ingestion: Rinse mouth with water. Give water to drink provided person is conscious. Do NOT induce vomiting. Seek medical attention.

First Aid Facilities: Ensure washing facilities, including an eyewash, are available and maintained.

Symptoms caused by Exposure:

Inhalation: Inhalation of product dust/vapours may cause respiratory tract irritation, coughing and shortness of breath. Inhalation of nitrous gases (decomposition product) may cause edema of the lungs. Symptoms may be delayed up to 48 hours.

Skin Contact: Causes skin irritation, redness, itching and pain.

Eye Contact: Causes eye irritation, redness and pain.

Ingestion: Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. Small amounts are unlikely to cause toxic effects. Large amounts may give rise to gastro-intestinal disorders and in extreme cases, formation of methaemoglobin (blue baby syndrome) and cyanosis (indicated by blueness around the mouth) may occur.

Medical Attention and Special Treatment:

Notes to Physician: Treat symptomatically based on individual reactions of patient and judgement of doctor. NOTE: For advice in an emergency, contact a Poisons Information Centre (Australia 13-11-26 or New Zealand 0800-764-766).

Persons with other blood dyscrasias, especially anemia might have increased sensitivity.

Persons exposed to other oxidizing agents or other agents known to induce

methemoglobinemia, such as aniline, nitrobenzene, or other nitrates, or those exposed to agents known to deprive the body of oxygen, such as carbon monoxide, hydrogen sulfide or

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asphyxiates, might be hypersusceptible. Pre-existing heart disease might be aggravated from exposure to this product.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Equipment:	In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions. Water spray may be used to cool down fire-exposed containers.
Specific Hazards arising from the Chemical:	Non-combustible solid. But substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Can cause explosions in contact with combustible dust or vapours, occasionally explosive by shock or friction. Sensitive to mechanical impact. Incompatible with oxidizing agents, organic materials, powdered metals, ammonia, hydrazine, reducing agents, combustible materials and sources of ignition. Exposure to heat may result in build-up of dangerous pressures. Other calcium nitrate compounds are strong oxidizers and react violently upon contact with many organic substances, particularly textile and paper. When involved in a fire, this product may generate oxides of nitrogen.
Special Protective Equipment and Precautions for Fire Fighters:	Fire fighters should wear self contained breathing apparatus and full protective clothing along with protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:	Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Use spark-proof tools and equipment.
Environmental Precautions:	Do not allow product to reach drains, sewers or waterways. If the product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
Methods and Materials for Containment and Cleaning Up:	Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled chemical waste container and hold for safe disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary
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Conditions for Safe Storage, including any Incompatibilities: measures against static discharges by bonding and grounding equipment. Avoid contact with skin and eyes. Do not breathe dust. Store in a cool, dry, well-ventilated area. Store in original packaging as approved by manufacturer. Keep containers tightly sealed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect from physical damage. Store away from incompatible materials including oxidizing agents, organic materials, powdered metals, ammonia, hydrazine, reducing agents, combustible materials and sources of ignition. Protect from direct sunlight and moisture. Do not store on wooden flooring. Avoid generating dust.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards: No exposure standard has been established for this product by Safe Work Australia (SWA). However, the exposure standard for dust not otherwise specified is 10 mg/m³ (for inspirable dust) and 3 mg/m³ (for respirable dust).

Biological Monitoring: Not available.

Control Banding: Not available.

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Individual Protection Measures e.g. Personal Protective Equipment (PPE): Please observe the usual precautionary measures for handling of chemicals

Eye and Face Protection:
Safety glasses with side shields (AS1336/1337).

Skin Protection:
Wear protective gloves (AS2161).
Long-sleeved protective clothing and safety footwear (AS3765/2210).

Respiratory Protection:
Wear an approved respirator where dusts/vapours are generated and engineering controls are inadequate (AS1715/1716).

Thermal Hazards:
None specified.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White granules
Odour:	Odourless
Vapour Pressure (mm Hg):	Not applicable
Bulk Density:	1100 kg/m ³
Boiling Point:	Not applicable

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Melting Point:	45°C
Solubility (aqueous solution):	Soluble
Specific Gravity:	Not applicable
pH (of a 10% solution):	5.7-7.0
Flash Point:	Not applicable
Flammability (explosive) Limits:	Not applicable
Auto-Ignition Temperature:	Not applicable
Octanol/Water Partition Coefficient:	Not available

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions of storage and handling.
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
Conditions to Avoid:	Avoid excessive heat, generating dust, direct sunlight, moisture, static discharges and high temperatures.
Incompatible Materials:	Incompatible with oxidizing agents, organic materials, powdered metals, ammonia, hydrazine, reducing agents, combustible materials and sources of ignition.
Hazardous Decomposition Products:	When involved in a fire, this product may generate oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Toxicological Information of the Mixture:

Acute Toxicity:	Calcium Nitrate: Oral LD50 Rat: >2000 mg/kg Ammonium Nitrate: Oral LD50 Rat: 2217 mg/kg Calcium Nitrate Tetrahydrate: Oral LD50 Rat: 3900 mg/kg
Skin Corrosion/Irritation:	No data available
Serious Eye Damage/Irritation:	Calcium Nitrate Tetrahydrate: 500 mg/24 hr Mild Irritation (rabbit)
Respiratory or Skin Sensitisation:	No data available
Germ Cell Mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive Toxicity:	No data available
Specific Target Organ Toxicity (STOT) -	No data available

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Single Exposure:

Specific Target Organ Toxicity (STOT) - No data available

Repeated Exposure:

Aspiration Hazard: No data available

Likely Routes Of Exposure

Inhalation: Inhalation of product dust/vapours may cause respiratory tract irritation, coughing and shortness of breath. Inhalation of nitrous gases (decomposition product) may cause edema of the lungs. Symptoms may be delayed up to 48 hours.

Skin: Causes skin irritation, redness, itching and pain.

Eye: Causes eye irritation, redness and pain.

Ingestion: Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. Small amounts are unlikely to cause toxic effects. Large amounts may give rise to gastro-intestinal disorders and in extreme cases, formation of methaemoglobin (blue baby syndrome) and cyanosis (indicated by blueness around the mouth) may occur.

Delayed and Immediate Effects from Short and Long Term Exposure:

Not available

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available.

Persistence and Degradability: Ammonium ion is toxic to plants in large concentrations. Ammonium ion will convert to the nitrate form with accompanying acidification of the soil. Nitrate ion will leach more easily than ammonium ion, and may pollute water courses and are toxic to people (especially children) at high concentrations (methemoglobinemia). Nitrate ion will become part of the natural Nitrogen cycle by converting to nitrogen gas (N₂) or by becoming part of organisms.

Bioaccumulative Potential: No data available

Mobility in Soil: Ammonium and nitrate ions are mobile (the nitrate ion more so than ammonium ion) and will leach from soils and into water courses. Calcium ion is less mobile and will remain attached to soil constituents.

13. DISPOSAL CONSIDERATIONS

Product Disposal: Dispose of in accordance with all local, state and federal regulations.

Container Disposal: Dispose of according to state, federal and local regulations.

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14. TRANSPORT INFORMATION

Classification:	Based on available information, not classified as Dangerous Goods for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7 th Edition. Special Provision 208 of the IMDG Code states 'The commercial grade of calcium nitrate fertilizer, when consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10% ammonium nitrate and at least 12% water of crystallization, is not subject to the provisions of this Code.
UN Number:	None allocated
Proper Shipping Name or Technical Name:	None allocated
Transport Hazard Class:	None allocated
Packing Group:	None allocated
Environmental Hazards for Transport Purposes:	None allocated
Special Precautions for User:	None allocated
HAZCHEM Code:	None allocated

15. REGULATORY INFORMATION

SUSMP:	Not scheduled
APVMA:	Exempt from registration
State Departments of Agriculture / Primary Industries:	Registration not required
Australian Inventory of Chemical Substances (AICS):	All components listed
Toxic Substance – NZ	Exempt

16. OTHER INFORMATION

Edition:	Initial edition
Revision Due:	December 2021
Reason for Revision:	Initial version
Preparation	Prepared by Campbells Fertilisers Australasia



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Information:

Data Sources: Supplier SDS

Glossary:

- ACGIH** American Conference of Government Industrial Hygienists
- APVMA** Australian Pesticides and Veterinary Medicines Authority
- CAS** Chemical Abstract Services number, used to uniquely identify chemical compounds
- NOHSC** National Occupational Health and Safety Commission
- PPE** Personal protective equipment
- SUSMP** Standard for the Uniform Scheduling of Medicines and Poisons
- HCIS** Hazardous Chemicals Information System

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Campbell's Fertilisers, it is the user's responsibility to determine conditions of safe use of the product.

END OF SDS