

# SAFETY DATA SHEET

## Campbells AquaFert Calcium Nitrate

Date of Issue: August 2016

### 1. IDENTIFICATION

<b>Product Identifier:</b>	<b>Campbells AquaFert Calcium Nitrate</b>
<b>Other Means of Identification:</b>	Calcium nitrate; calcium dinitrate; calcium saltpeter; nitric acid, calcium salt
<b>Recommended Use of the Chemical and Restrictions on Use:</b>	Fertiliser
<b>Details of Manufacturer or Importer:</b>	Campbells Fertilisers Australasia 18 Raymond Road, Laverton North, Victoria, 3026 Phone: (03) 9931 2211 Fax: (03) 9931 2201 <a href="http://www.campbellsfert.com.au">www.campbellsfert.com.au</a>
<b>Emergency Telephone Number:</b>	(03) 9931 2211 (business hours only 8.30 am to 5.00 pm) 0418 350 726 (after business hours)

### 2. HAZARD(S) IDENTIFICATION

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

Labelling according to Regulation (EC) No. 1272/2008 [CLP]



Pictogram: Exclamation Mark

Pictogram: Corrosion

**GHS Hazard Class and Category:**

Acute Toxicity Oral Category 4: "Warning"

Hazard statement: H302 Harmful if swallowed

Eye Damage Category 1: "Danger"

Hazard statement: H318 Causes serious eye damage

Precautionary Statements:

**Prevention**

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product.

P280 Wear eye protection/face protection

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### Response

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.

P310 Immediately call a POISON CENTRE or doctor/physician

### Storage

No additional information

### Disposal

P501 Dispose of contents/container in accordance with local/regional/national regulations

### ADG

**Classification:** Based on available information, not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7<sup>th</sup> Edition

### SUSMP

**Classification:** Not scheduled

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component:	CAS Number:	Proportion (%w/w):
Calcium nitrate, anhydrous	10124-37-5	51

## 4. FIRST AID MEASURES

### Description of Necessary First Aid Measures:

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Respiratory problems: consult a doctor/medical service.

**Skin Contact:** Rinse with water. Soap may be used. Remove all contaminated clothing and footwear. Take victim to a doctor if irritation persists. Wash contaminated clothing before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water (>15min), occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist.

**Ingestion:** Consult a doctor/medical service if you feel unwell. Rinse mouth with water. Immediately after ingestion: give lots of water to drink. If swallowed, do NOT induce vomiting. Do not give an unconscious person anything to drink.

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

**Advice:** Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give

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psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

### Symptoms caused by Exposure:

**Inhalation:** None specified  
**Skin Contact:** None specified  
**Eye Contact:** Redness of the eye tissue. Irritation of the eye tissue.  
**Ingestion:** Nausea. Abdominal pain. After absorption of high quantities: Methemoglobinemia. Blue/grey discolouration of the skin. Feeling of weakness. Dizziness. Respiratory difficulties.

### Medical Attention and Special Treatment:

Normally no immediate medical service and special treatment is needed. The product can cause methemoglobinemia.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Equipment:** Use fire extinguishing methods suitable to surrounding conditions. Preferably: water.

**Specific Hazards arising from the Chemical:** Non-combustible.

**Special Protective Equipment and Precautions for Fire Fighters:** Exposure to fire/heat: keep upwind; consider evacuation; have neighbourhood close doors and windows. Dilute toxic gases with water spray. 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) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:** Ensure adequate air ventilation. Do not get in eyes, on skin, or on clothing. Keep away from naked flames/heat.

For non-emergency personnel: Wear protective gloves/protective clothing/eye protection as advised in section 8. Mark the danger area. No naked flames. Keep containers closed. Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.

For emergency responders: Wear protective gloves/protective clothing/eye protection as advised in section 8.

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<b>Environmental Precautions:</b>	Stop leaks if possible. Dam up the liquid spill. Prevent spreading in sewers. Prevent soil and water pollution. Contain leaking substance, pump over in suitable containers. Turn leaking containers leak-side up to prevent the escape of liquid. Notify authorities if product enters sewers or public waters.
<b>Methods and Materials for Containment and Cleaning Up:</b>	Any spillage should be cleaned up immediately. Collect spill in closed and suitable containers for disposal. Take up rest of liquid spill into absorbent material sand, earth, vermiculite. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. Dispose of the product, depending on the degree and type of contamination, either as fertilizer or in an authorized waste disposal site.

### 7. HANDLING AND STORAGE

<b>Precautions for Safe Handling:</b>	Use sufficient ventilation. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection as advised in section 8. Ensure eye wash stations and safety showers are available in the immediate vicinity of any potential exposure at the workplace and maintained. Avoid splashing. Do not eat, drink or smoke during use. Always wash hands after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Do not discharge the waste into the drain.
<b>Conditions for Safe Storage, including any Incompatibilities:</b>	Keep preferably in the original container and store between -10°C and 30°C. Keep away from iron. Do not use with copper/aluminium/zinc - risk of corrosion. Keep substance away from: heat sources, combustible materials, reducing agents, (strong) acids, (strong) bases, organic materials, metals. Store in dry, cool, well-ventilated area. Keep out of direct sunlight. Provide for a tub to collect spills. Secure fragile packagings in solid containers. Suitable packaging materials: synthetic material, glass, stainless steel. Materials to avoid: aluminium, iron, copper.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>Exposure Standards:</b>	<u>Calcium nitrate 8.7%N Liquid</u>	
	<u>Derived No Effect Level (DNEL)/ Derived Minimal Effect Levels (DMEL)</u>	
	Long term systemic effects	
	<i>Workers</i>	<i>General population</i>
	Oral	8.33 mg/kg bodyweight/day
	Dermal	8.33 mg/kg bodyweight/day
	Inhalation	29 mg/m <sup>3</sup>
	<u>PNEC (Water)</u>	
	PNEC aqua (freshwater)	0.45 mg/L
	PNEC aqua (marine water)	0.045 mg/L
	PNEC aqua (intermittent, freshwater)	4.5 mg/L

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	<u>PNEC (STP)</u>	
	PNEC sewage treatment plant	18 mg/L
<b>Biological Monitoring:</b>	Not available.	
<b>Control Banding:</b>	Not available.	
<b>Engineering Controls:</b>	Ensure good ventilation of the work station. Maintain eye wash stations and safety showers at the workplace.	
<b>Individual Protection Measures e.g. Personal Protective Equipment (PPE):</b>	<p><i>Eye and Face Protection:</i> Wear protective safety glasses.</p> <p><i>Skin Protection:</i> Gloves. Nitrile rubber (NBR). Permeation time: minimum &gt;480min long term exposure; material/thickness: 0.38 mm. Replace damaged gloves. Normal working clothes are suitable.</p> <p><i>Respiratory Protection:</i> Ensure adequate air ventilation. Mist formation: aerosol mask with filter type P2.</p> <p><i>Thermal Hazards:</i> None specified.</p>	

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Colourless liquid
<b>Odour:</b>	Odourless
<b>Vapour Pressure:</b>	+/- 2300 hPa (as water)
<b>Density:</b>	1.5 kg/L
<b>Boiling Point:</b>	Not applicable
<b>Freezing/Melting Point:</b>	+/- 560°C (anhydrous form)
<b>Crystallization Temperature</b>	< -15°C
<b>pH:</b>	2.5-5
<b>Flash Point:</b>	Not applicable
<b>Flammability (explosive) Limits:</b>	No data available
<b>Auto-Ignition Temperature:</b>	No data available
<b>Octanol/Water Partition Coefficient:</b>	No data available
<b>Solubility in Water:</b>	Completely soluble in water
<b>Oxidising Properties:</b>	Not oxidising. The anhydrous product is considered to be an oxidizer.
<b>Specific Conductivity</b>	+/- 0,96 mS/cm (25°C)

### 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Stable in use and storage conditions as recommended in section 7.
<b>Chemical Stability:</b>	Stable under normal conditions of storage and handling
<b>Possibility of</b>	Thermal decomposition can lead to the escape of irritating gases and

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<b>Hazardous Reactions:</b>	vapours (oxides of nitrogen). Decontamination with reducing agents or strong acids can cause formation of toxic gases (oxides of nitrogen). It can enhance combustion of other substances.
<b>Conditions to Avoid:</b>	Avoid high temperatures, temperatures lower than -10°C, and contamination with combustible materials.
<b>Incompatible Materials:</b>	May be corrosive to some metals. Keep substance away from: reducing agents, combustible materials.
<b>Hazardous Decomposition Products:</b>	On heating/burning: release of toxic and corrosive gases/vapours nitrous vapours.

### 11. TOXICOLOGICAL INFORMATION

#### Toxicological Information of the Mixture:

<b>Acute Toxicity:</b>	<i>Calcium nitrate 8,7%N Liquid</i> LD50 (oral rat): 300 - 2000 mg/kg bodyweight (OECD 423) LD50 (dermal rat): > 2000 mg/kg bodyweight (OECD 402 with potassium pentacalcium nitrate decahydrate) LC50 (inhalation rat) (mg/L: no data, low vapour pressure) ATE (oral): 500 mg/kg
<b>Skin Corrosion/Irritation:</b>	Not classified; pH: 2.5 – 5 (OECD 404, with ammonium nitrate)
<b>Serious Eye Damage/Irritation:</b>	Causes serious eye damage; pH: 2.5 – 5 (OECD 405, with calcium nitrate tetrahydrate)
<b>Respiratory or Skin Sensitisation:</b>	Not classified (OECD 429, with sodium nitrate)
<b>Germ Cell Mutagenicity:</b>	Not classified; Negative (OECD 471, with nitric acid ammonium calcium salt)
<b>Carcinogenicity:</b>	Not classified; no data
<b>Reproductive Toxicity:</b>	Not classified; Oral 28-day NOAEL ≥1500 mg/kg bw/day (OECD 422, with potassium nitrate)
<b>Specific Target Organ Toxicity (STOT) - Single Exposure:</b>	Not classified
<b>Specific Target Organ Toxicity (STOT) - Repeated Exposure:</b>	Not classified
<b>Aspiration Hazard:</b>	Not classified
<b>Likely Routes Of Exposure</b>	
<b>Inhalation:</b>	None specified
<b>Skin:</b>	None specified
<b>Eye:</b>	Redness of the eye tissue. Irritation of the eye tissue.
<b>Ingestion:</b>	Nausea. Abdominal pain. After absorption of high quantities: Methemoglobinemia. Blue/grey discolouration of the skin. Feeling of weakness. Dizziness. Respiratory difficulties.

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### 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	Mild water pollutant (surface water). Ground water pollutant. Not harmful to fishes LC50 (96h) >1000 mg/L. May cause eutrophication. <u>Calcium nitrate 8,7%N Liquid</u> LC50 (fish) 1378 mg/L 96-h (OECD 203, with potassium nitrate) EC50 (Daphnia) 490 mg/L 48-h (no guideline followed, with potassium nitrate) ErC50 (algae) > 1700 mg/L 10-d (seawater, no guideline followed, performed with potassium nitrate) NOEC (acute) 180 mg/L 3-h EC50: >1000 mg/L (OECD 209, with sodium nitrate)
<b>Persistence and Degradability:</b>	<u>Calcium nitrate 8,7%N Liquid</u> According to literature, easily degradable in the soil. The average biodegradation rate in a wastewater plant at 20°C (dissolved solid/day): 70 g N/kg
<b>Bioaccumulative Potential:</b>	<u>Calcium nitrate 8,7%N Liquid</u> Slightly or not bioaccumulative. <u>Calcium nitrate, anhydrous</u> According to literature, not bioaccumulative.
<b>Mobility in Soil:</b>	<u>Calcium nitrate 8,7%N Liquid</u> Soluble in water. Low potential for adsorption (based on substance properties).

### 13. DISPOSAL CONSIDERATIONS

<b>Product Disposal:</b>	Dispose the product, depending on the degree and type of contamination, either as fertilizer or in an authorized waste disposal site. Dispose of according to local regulations.
<b>Container Disposal:</b>	Empty and rinsed containers can be disposed as non-hazardous material or be returned for recycling. Dispose of according to local regulations.

### 14. TRANSPORT INFORMATION

<b>Classification:</b>	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 <sup>th</sup> Edition.
<b>UN Number:</b>	Not applicable
<b>Proper Shipping Name or Technical Name:</b>	Not applicable
<b>Transport Hazard Class:</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental</b>	Not applicable



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**Hazards for Transport Purposes:**  
**Special Precautions for User:** Not applicable  
**HAZCHEM Code:** Not applicable

### 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

### 16. OTHER INFORMATION

**Edition:** Initial edition  
**Revision Due:** July 2021  
**Reason for Revision:** Initial version  
**Preparation Information:** Prepared by Campbells Fertilisers Australasia  
**Data Sources:** Supplier SDS  
**Trademark Information:** Aqua-Fert is a Registered Trademark of Campbells Fertilisers Australasia

#### Glossary:

**APVMA** Australian Pesticides and Veterinary Medicines Authority  
**CAS** Chemical Abstract Services number, used to uniquely identify chemical compounds  
**PPE** Personal protective equipment  
**SUSMP** Standard for the Uniform Scheduling of Medicines and Poisons

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