

# Safety Data Sheet

## CALCIUM NITRATE

SDS No: 161/09/22

Effective Date: 20/09/2022

Revision no: 000

Product Code: 161000

### SECTION 1

#### COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

**Product Name:** Calcium Nitrate  
**Chemical Identifier:** Calcium Nitrate  
**Product Use:** Fertilizer  
**Restrictions on use:** Agriculture

**Supplier:** In Line Trading 112 (Pty) Ltd. (Co. Reg. No. 2003/008663/07)  
Cedar Lake Industrial Estate,  
C/O M57 & Porcelain Roads, Olifantsfontein, 1666, Gauteng, RSA  
**Telephone:** (011) 392 4072  
**Website:** [www.nutrigo.co.za](http://www.nutrigo.co.za)

#### **Emergency Contact Numbers**

Griffon Poison Information: +27 82 446 8946

### SECTION 2

#### HAZARDS IDENTIFICATION

Classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard Classes	Hazard Category	Hazard Statement Code	Hazard Statements
<b>Health</b>			
Oxidizing solids	3	H272	May intensify fire; oxidizer
Acute toxicity (oral)	4	H302	Harmful if swallowed
Acute toxicity (dermal)	-	-	-
Inhalation	-	-	-
Skin irritation	2	H315	Causes skin irritation
Eye irritation	2/2A	H319	Causes serious eye irritation
Reproductive	-	-	-
STOT SE (respiratory)	-	-	-
<b>Environmental</b>			
Aquatic (acute/chronic)	-	-	-

**Label elements:** labelling as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

#### **Hazard pictograms**



**Signal word -** Warning

## Precautionary statements

P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking.
P220	Keep away from clothing and other combustible materials.
P264+P265	Wash hands thoroughly after handling. Do not touch eyes.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317	IF SWALLOWED: Get medical help.
P302+P352	IF ON SKIN: wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P332+P317	If skin irritation occurs: Get medical help.
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use water to extinguish.
P371+P380+P375	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
P420	Store separately.
P501	Dispose of contents/container in accordance with local regulations.

**Special labelling of certain mixtures –** None known

**Other hazards –** None known

**Toxicity:** Classification according to GHS: Category 4

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## **SECTION 3** **COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance/Mixture:** Mixture

### **Declared Ingredients:**

Chemical name	CAS No.	EC No.	Conc. %w/w	Classification Regulation (EC) 1272/2008
Calcium Nitrate	10124-37-5	233-332-1	> 60	H272, H302, H315, H319

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## **SECTION 4** **FIRST AID MEASURES**

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.

**INHALATION:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation persists.

**SKIN:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.

**EYES:** Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.

**INGESTION:** Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not

give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water and give 2 to 3 glasses of water to drink.

**IMPORTANT ACUTE EFFECTS:** Harmful if swallowed.  
Causes skin irritation.  
Causes serious eye irritation.

**IMPORTANT DELAYED EFFECTS:** None known.

**NOTE TO PHYSICIAN:** This product contains Calcium Nitrate. Treat symptomatically and supportively.

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### **SECTION 5** **FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Use water.

**Unsuitable Extinguishing Media:** Dry chemicals or foams.

**Specific hazards:** May give off toxic oxides of nitrogen when involved in fire.  
Greatly intensifies the burning of all combustible materials.

**Special Fire Fighting Procedures:** Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.

**Personal protective equipment:** Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear.

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### **SECTION 6** **ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Avoid contact with eyes. Do not breathe in spray mist or fumes.  
Ventilate area of spill or leak, especially in contained areas.

**Protective equipment:** Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

**Emergency procedures:** Alert emergency personnel, evacuate unprotected personnel and animals.

**Environmental Precautions:** Prevent spilled product from entering sewers, waterways, or ground water. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs.

**Methods & Materials for Containment:** Contain spilled product by diking area with sand or earth.

**Methods & Materials for Clean-up:** Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spill material. Collect washings and add to the drums already collected. Do not

flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

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## **SECTION 7** **HANDLING AND STORAGE**

### **HANDLING**

#### **Precautions for safe handling:**

Harmful if swallowed. Avoid contact with skin and eyes. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

#### **General occupational hygiene:**

Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

### **STORAGE**

#### **Conditions for safe storage:**

Keep out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed, in an isolated, dry, cool and well-ventilated area. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

**Incompatible substances and mixtures:** Refer to product label.

**Packaging material:** Bags

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## **SECTION 8** **EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Permissible concentration:** No occupational exposure limits have been determined for the significant ingredients in this product.

### **ENGINEERING CONTROLS:**

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

### **PERSONAL PROTECTIVE EQUIPMENT**

#### **Respiratory Protection:**

For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator.

#### **Hand Protection:**

The use of chemically protective gloves is recommended to prevent against skin contact.

#### **Eye Protection:**

The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

**Skin and Body Protection:** Wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

**Emergency eyewash:** Where there is any possibility that a handler's eyes may be exposed to this substance; an eye wash fountain should be provided or appropriate alternative within the immediate work area for emergency use.

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**SECTION 9**  
**PHYSICAL AND CHEMICAL PROPERTIES**

<b>Property</b>	<b>Value/description</b>	<b>Method</b>
Physical state	Solid (granular)	Visual
Colour	White to light grey	Visual or Munsell
Odour	Odourless	Organoleptic
pH (1% aqueous dilution)	5.5 – 7.0	CIPAC MT 75.3
Melting/Freezing point	Not applicable	
Boiling point	Not applicable	
Flash point	Not applicable	
Flammability	Not flammable	
Vapour pressure	Not applicable	
Relative Vapour Density	Not applicable	
Density	Not applicable	
Solubility	Soluble in water	
n-Octanol/Water partition coefficient	Not applicable	
Auto-ignition temperature	Not applicable	
Decomposition temperature	Not applicable	
Viscosity	Not applicable	
Explosive properties	Not explosive	
Oxidising properties	Oxidizer	

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**SECTION 10**  
**STABILITY AND REACTIVITY**

**Chemical Stability:** The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.

**Reactivity:** Not applicable.

**Possibility of Hazardous Reactions:** Not applicable.

**Conditions to Avoid:** Extreme heat or exposure to flames.

**Incompatible Materials:** Refer to product label.

**Hazardous Decomposition Products:** Not applicable

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**SECTION 11**  
**TOXICOLOGICAL INFORMATION**

**GHS Classification:** Harmful if swallowed (H302)  
Causes skin irritation (H315)  
Causes serious eye irritation (H319)

Toxicity	Effective dose/ concentration	Value	Species	Method/Source
Acute Oral	LD <sub>50</sub>	302 mg/kg	Rat	

Acute Dermal	LD <sub>50</sub>	> 5000 mg/kg	Rabbit	ATE Calculations
Acute Inhalation	LC <sub>50</sub>	> 5.00 mg/L	Rat	
Skin irritation	Causes skin irritation.			
Eye damage	Causes serious eye irritation.			
Skin sensitization	Not classified as a skin sensitizer.			
Respiratory sensitization	Not classified as a respiratory sensitizer.			
Mutagenicity/Genotoxicity: In vivo In vitro	Not classified as a mutagenic toxicant			
Carcinogenicity	Not classified as a carcinogen.			
Reproductive toxicity	Not classified as a reproductive toxicant.			
Specific target organ toxicity: Single exposure Repeated exposure	Not classified as a specific target organ toxicant			
Chronic effects (e.g developmental)	None known			

## **SECTION 12** **ECOLOGICAL INFORMATION**

**GHS Classification:** Not classified as an environmental toxicant according to classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

### **ENVIRONMENTAL EFFECTS**

**Persistence and degradability:** Not determined  
**Bio-accumulative Potential:** Not determined.  
**Mobility in soil:** Not determined.  
**Other adverse effects:** Not determined.

## **SECTION 13** **DISPOSAL CONSIDERATIONS**

Hazardous waste according to Directive 2008/98/EC (waste framework directive).

**Waste:** Open dumping or burning of this product is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

**Container:** Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

## **SECTION 14** **TRANSPORT INFORMATION**

**UN Number:** 1454

**Road Transport ADR/IRD:**

Class: 5.1

Packaging group: III

UN Proper Shipping Name: Calcium Nitrate

**Maritime Transport IMDG/IMO:**

Class: 5.1

Packaging group: III

UN Proper Shipping Name: Calcium Nitrate

Marine Pollutant (Y/N): No.

**Air Transport IATA/ICAO:**

Class: 5.1

Packaging group: III

UN Proper Shipping Name: Calcium Nitrate

**Special/Environmental Precautions:** Keep the bags sealed to avoid spills.

**Transport in bulk** (according to MARPOL 73/78, Annex II and the IBC code): Not available.

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**SECTION 15**  
**REGULATORY INFORMATION**

**Safety, health and environmental regulations/legislation for the mixture:** OSHA 1993 Regulations for Hazardous Chemical Substances.

**Relevant information regarding restrictions:** None.

**EU regulation:** Regulation EC1272/2008 (EU-GHS/CLP)

**Other national regulations:** None.

**Chemical Safety Assessment carried out?** No

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**SECTION 16**  
**OTHER INFORMATION**

**PACKAGING:**

Packed in 25, 50, 1000 kg bags, labelled according to South African regulations and guidelines.

**DISCLAIMER:**

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.