

Calcium Nitrate

SECTION 1. IDENTIFICATION

Product Identifier	Calcium Nitrate
Other Means of Identification	Calcium dinitrate, Lime nitrate
Product Code(s)	CA3510
Product Family	Inorganic Solid
Recommended Use	Industrial.
Restrictions on Use	None known.
Supplier Identifier	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
Emergency Phone No.	CANUTEC CANADA, 613-996-6666, 24 Hours
SDS No.	0476

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Serious eye damage - Category 1; Specific target organ toxicity (single exposure) - Category 3

Label Elements



Signal Word:
Danger

Hazard Statement(s):

Harmful if swallowed.
Causes serious eye damage.

Precautionary Statement(s):

Wear protective gloves/protective clothing/eye protection/face protection.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wash hands and skin thoroughly after handling.
Take any precaution to avoid mixing with combustibles.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of water.
Immediately call a POISON CENTRE or doctor.

Product Identifier: Calcium Nitrate

Date of Preparation: April 21, 2016

Page 01 of 06

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Calcium Nitrate	10124-37-5	70 - 80	Calcium dinitrate, Lime nitrate
Ammonium nitrate	6484-52-2	7 - 10	Nitram, Nitric acid ammonium salt

Notes

There are no additional ingredients present which, within the current knowledge of the supplier and the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do.

Ingestion

Rinse mouth with water. Do not induce vomiting. If vomiting occurs, have person lie on side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

First-aid Comments

All first aid procedures should be periodically reviewed by a doctor familiar with the material and its condition of use in the workplace. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

If in eyes: contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result.

Immediate Medical Attention and Special Treatment

Special Instructions

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use flooding quantities of water spray or fog.

Unsuitable Extinguishing Media

DO NOT use carbon dioxide, or other agents that smother the flames.

Specific Hazards Arising from the Product

Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

Product Identifier: Calcium Nitrate

Date of Preparation: April 21, 2016

Page 02 of 06

In a fire, the following hazardous materials may be generated: corrosive, oxidizing nitrogen oxides. Calcium Oxide.

Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. Oxidizer. Prevent contact with flammable and combustible materials. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Emergency responders: evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Eliminate all ignition sources if safe to do so. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Avoid generating dusts. Do not get in eyes, on skin or on clothing. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty.

Conditions for Safe Storage

Store in an area that is: cool, dry. Protect from sunlight. Separate from incompatible materials (see Section 10: Stability and Reactivity). Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). Clear of combustible and flammable materials (e.g. old rags, cardboard). Store in a closed container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Calcium Nitrate	Not established		Not established			
Ammonium nitrate	Not established		Not established			

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Product Identifier: Calcium Nitrate

Date of Preparation: April 21, 2016

Basic Physical and Chemical Properties

Appearance	White crystals.
Odour	Odourless
Odour Threshold	Not available
pH	6.3
Melting Point/Freezing Point	400 °C (752 °F) (melting); 400 °C (752 °F) (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	Not available
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Solid
Other Physical Property 1	Concentration for pH @ 6.3 is at 110g/l .

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Incompatible materials. Generation of dust. Contact with combustible materials.

Incompatible Materials

Reducing agents (e.g. hydroquinone), strong acids (e.g. hydrochloric acid), metals (e.g. aluminum).

Hazardous Decomposition Products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Calcium Nitrate	Not available	3900 mg/kg (rat)	Not available
Ammonium nitrate	> 88.8 mg/L (rat) (4-hour)	2217 mg/kg (rat)	Not available

Product Identifier: Calcium Nitrate

Date of Preparation: April 21, 2016

exposure)

Skin Corrosion/Irritation

There is limited evidence of moderate or severe irritation.

Serious Eye Damage/Irritation

Causes serious eye damage based on skin corrosion information.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

No information was located.

Ingestion

Harmful.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

No information was located.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Calcium Nitrate	Not Listed	Not Listed	Not Listed	Not Listed
Ammonium nitrate	Not evaluated	Not Listed	Not Listed	

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Product Identifier: Calcium Nitrate

Date of Preparation: April 21, 2016

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL or are not required to be listed.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.

SECTION 16. OTHER INFORMATION

SDS Prepared By Alphachem Limited

Phone No. (905)-821-2995

Date of Preparation April 21, 2016

Date of Last Revision August 10, 2016

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). Yara North America Inc database.

Disclaimer This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.