

Calcium nitrate

SECTION 1. IDENTIFICATION

Product Identifier	Calcium nitrate
Other Means of Identification	15.5-0-0+18Ca
Product Family	Richgrow
Recommended Use	Fertilizer.
Restrictions on Use	Not applicable.
Supplier Identifier	TerraLink Horticulture Inc., 464 Riverside Road, Abbotsford, BC, V2S 7M1, 1-800-661-4559
Emergency Phone No.	CANUTEC, In the event of an emergency involving dangerous goods, call 613-996-6666 or *666 on a cellular phone.
SDS No.	0078
Date of Preparation	March 15, 2016

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Acute toxicity (Oral) - Category 4; Serious eye damage - Category 1

Label Elements



Signal Word:

Danger!

Hazard Statement(s):

Harmful if swallowed.

Causes serious eye damage.

Precautionary Statement(s):

Wear protective gloves, eye protection.

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

Wash hands thoroughly after handling.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTRE/doctor/

IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

Rinse mouth.

Other Hazards

None known.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Calcium Nitrate	10124-37-5	75	Nitric acid, calcium salt (2:1)	
Water	7732-18-5	16		
Ammonium nitrate	6484-52-2	9	Nitric acid ammonium salt (1:1)	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

If inhaled, remove to fresh air. Get medical attention if symptoms occur. 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.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Get medical advice or attention if you feel unwell or are concerned.

Eye Contact

Rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 15 minutes. If wearing contact lens(es), remove after 5 minutes and continue rinsing for at least 10 minutes immediately call a Poison Centre or doctor.

Ingestion

Rinse mouth with water. Do not attempt to give anything by mouth to unconscious victim. If victim is alert and not convulsing, rinse mouth and give water to dilute material. Do not induce vomiting. If vomiting occurs, have victim lean forward with head down to avoid breathing in vomit, rinse mouth. Obtain medical attention immediately.

First-aid Comments

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.

Most Important Symptoms and Effects, Acute and Delayed

If in eyes: causes moderate to severe irritation. If inhaled: can cause severe irritation of the nose and throat. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest. Symptoms may develop hours after exposure and are made worse by physical effort. If swallowed: can burn the lips, tongue, throat and stomach.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, digestive system.

Special Instructions

No information available.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use flooding quantities of water for extinction.

Unsuitable Extinguishing Media

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Do NOT use chemical extinguisher or foam or attempt to smother the fire with steam or sand.

Specific Hazards Arising from the Product

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 and Precautions 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.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental Precautions

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).

Methods and Materials for Containment and Cleaning Up

Small spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Large spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Other Information

No other information was found.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

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. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. See also Section 8 for additional information on hygiene measures.

Conditions for Safe Storage

Store in accordance with local regulations. 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

Appropriate Engineering Controls

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

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Skin Protection

Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

No specific guidelines are available. Contact chemical manufacturer/supplier for advice.

Respiratory Protection

If airborne concentration is high, use an appropriate respirator or dust mask. Refer to the OSHA Respirator Standard 29 CFR 1910.134 for proper selection and use of personal respirators.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Milky white crystalline crystals.
Odour	Odourless
Odour Threshold	Not applicable
pH	5 - 7; Reacts with water to form an alkaline solution.
Melting Point/Freezing Point	400 °C (752 °F) (melting); Not applicable (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not applicable
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); Not applicable (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	2.05
Solubility	Very soluble in water; Highly soluble in alcohols (e.g. ethanol).
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Solid
Bulk Density	1100 kg/m ³

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Avoid contamination by any source including metals, dust and organic materials.

Incompatible Materials

Alkalis organic materials combustible materials acids reducing agents (e.g. hydroquinone).

Hazardous Decomposition Products

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Very toxic carbon monoxide, carbon dioxide; corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides.

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		500 mg/kg (female rat)	> 2000 mg/kg (rat)
Ammonium nitrate		500 mg/kg (female rat)	> 2000 mg/kg (rat)

Skin Corrosion/Irritation

May cause skin irritation.

Serious Eye Damage/Irritation

Human experience shows serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

No known significant effects or critical hazards.

Skin Absorption

Not expected to be absorbed.

Ingestion

Ingestion of large amounts may cause gastrointestinal irritation characterized by abdominal cramps, nausea and vomiting. Ingestion may also cause headaches, laboured breathing, confusion and dizziness.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Not known to cause cancer.

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Effects on or via Lactation

Not known to cause effects on or via lactation.

Germ Cell Mutagenicity

Not known to be a mutagen.

Interactive Effects

No information was located.

No information was located for: STOT (Specific Target Organ Toxicity) - Single Exposure, Aspiration Hazard, STOT (Specific Target Organ Toxicity) - Repeated Exposure, Respiratory and/or Skin Sensitization, Development of Offspring, Sexual Function and Fertility, Effects on or via Lactation, Germ Cell Mutagenicity, Interactive Effects

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No known significant effects or critical hazards.

Persistence and Degradability

No ingredient of this product or its degradation products is known to be highly persistent.

Bioaccumulative Potential

This product and its degradation products are not known to bioaccumulate.

Mobility in Soil

If released into the environment, this product can move rapidly through the soil.

Other Adverse Effects

No known significant effects or critical hazards.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of according to local, provincial and federal government requirements.

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

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

NFPA Rating Health - 2 Flammability - 0 Instability - 0

SDS Prepared By Regulatory and Technical Resources

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Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists
IARC = International Agency for Research on Cancer
NIOSH = National Institute for Occupational Safety and Health
NTP = National Toxicology Program
OSHA = US Occupational Safety and Health Administration
RTECS® = Registry of Toxic Effects of Chemical Substances

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

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guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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