

# Safety Data Sheet

Classified according to WHMIS 2015

## SECTION 1: Identification

### 1.1. Product Identifier

**Trade Name or Designation:** Calcium Nitrate Tetrahydrate, ACS Reagent Grade

**Product Number:** RCPCC100

**Other Identifying Product Numbers:**

### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Cole-Parmer Instrument Company

**Address:** 625 EAST BUNKER COURT

VERNON HILLS, IL 60061 USA

**Telephone:** 800-323-4340

### 1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

Hazard Class	Category	Hazard	
		Statements:	Precautionary Statements:
Acute Toxicity - Oral	Category 4	H302	P264, P270, P301+P312, P330, P501
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310

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### 2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

Hazard Number	Hazard Statement
H302	Harmful if swallowed.
H318	Causes serious eye damage.

Precautionary Statements:

Precautionary Number	Precautionary Statement
P264	Wash arms, hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves and eye protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or 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 CENTER or physician.
P330	Rinse mouth.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

### 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Calcium Nitrate Tetrahydrate	Ca(NO <sub>3</sub> ) <sub>2</sub> ·4H <sub>2</sub> O	238.16 g/mol	13477-34-4	100.00

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## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Causes severe irritation, redness, pain, tearing and burns.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** Causes irritation to skin, symptoms include redness, itching, and pain.

**Ingestion:** IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Dilute with water or milk. Vomiting may occur spontaneously but do not induce. Call a physician immediately.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Harmful if swallowed. Causes serious eye damage. DANGER! Strong oxidizer. Contact with other material may cause fire. Harmful if swallowed, inhaled or absorbed through skin. Causes irritation to eyes, skin, and respiratory tract. Wash areas of contact with water. EYE CONTACT: Causes severe irritation, redness, pain, tearing and burns. SKIN CONTACT: Causes irritation to skin, symptoms include redness, itching, and pain.

### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute immediately with water or milk. Induce vomiting. Call a physician.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire (Water, water spray, foam, or dry chemical). If using water, do not allow water run off to enter sewer.

### 5.2. Specific Hazards Arising from the Substance or Mixture

Substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

### 6.2. Cleanup and Containment Methods and Materials

Ventilate area of leak or spill. Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

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## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

## SECTION 8: Exposure Controls / Personal Protection

### 8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Data not available.				

### 8.2. Exposure Controls

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** A system of local or general exhaust is recommended. If necessary, wear a dust mask respirator to minimize exposure to dust particles.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. A system of local or general exhaust is recommended. If necessary, wear a dust mask respirator to minimize exposure to dust particles. Chemical resistant gloves. Safety glasses or goggles.

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## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

**Appearance:** Colorless/white solid

**Physical State:** Solid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** 5.0-7.0 (5% solution)

**Melting/Freezing Point:** Data not available.

**Initial Boiling Point/Range:** Data not available.

**Flash Point:** Data not available.

**Evaporation Rate:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** Data not available.

**Vapor Density:** Data not available.

**Relative Density:** 1.82

**Solubility:** Data not available.

**Partition Coefficient:** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

### 10.2. Possibility of Hazardous Reactions

Data not available.

### 10.3. Conditions to Avoid and Incompatible Materials

Heavy metals, phosphites, organic compounds, carbonaceous materials, strong acids, and many other substances.

### 10.4. Hazardous Decomposition Products

Will not occur.

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### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

**Acute Toxicity - Oral Exposure:**

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

**Acute Toxicity - Dermal Exposure:**

Not applicable.

**Acute Toxicity - Inhalation Exposure:**

Not applicable.

**Acute Toxicity - Other Information:**

LD50, Oral, Rat: 3900 mg/kg, details of toxic effects not reported other than lethal dose value.

**Skin Corrosion and Irritation:**

Not applicable.

**Serious Eye Damage and Irritation:**

Causes serious eye damage. Wear protective gloves and eye protection. 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 CENTER or physician.

**Respiratory Sensitization:**

Not applicable.

**Skin Sensitization:**

Not applicable.

**Germ Cell Mutagenicity:**

Not applicable.

**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Not applicable.

**Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.

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### SECTION 12: Ecological Information

#### 12.1. Ecotoxicity

Not applicable.

#### 12.2. Persistence and Degradability

Data not available.

#### 12.3. Bioaccumulative Potential

Data not available.

#### 12.4. Mobility in Soil

Data not available.

#### 12.5. Other Adverse Ecological Effects

Data not available.

### SECTION 13: Disposal Considerations

#### 13.1. Waste Treatment Methods

Data not available.

### SECTION 14: Transportation Information

#### 14.1. Transportation by Land-Department of Transportation (DOT, United States of America)

**Sizes:** 500 g, 1000 g

**UN Number:** UN1454

**Proper Shipping Name:** Calcium Nitrate

**Hazard Class:** 5.1

**Packing Group:** III

**Hazard Label(s):**



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### 14.2. Transportation by Air - International Air Transport Association (IATA)

**Sizes:** 500 g, 1000 g

**UN Number:** UN1454

**Proper Shipping Name:** Calcium Nitrate

**Hazard Class:** 5.1

**Packing Group:** III

**Hazard Label(s):**



### 14.3 Transportation of Dangerous Goods (TDG, Canada)

**Sizes:** 500 g, 1000 g

**UN Number:** UN1454

**Proper Shipping Name:** CALCIUM NITRATE

**Hazard Class:** 5.1

**Packing Group:** III

**Hazard Label(s):**



## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Not listed.

### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): "1.0 % de minimis concentration (reportable only when in aqueous solution, listed under Chemical Category N511)" As Nitrate compounds, water dissociable [RR-03804-0]

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): 1.0 % de minimis concentration (reportable only when in aqueous solution, listed under Chemical Category N511)



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### 15.5. Massachusetts Right-to-Know Substance List

Not listed.

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Not listed.

### 15.7. New Jersey Worker and Community Right-to-Know Components

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): "sn 0324" As Calcium nitrate [10124-37-5];

"sn 3722" As Nitrate compounds [RR-01770-9]

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): "SN 3722 500 lb TPQ (water dissociable, Category Code N511)" As Nitrate compounds [RR-01770-9]

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): "sn 3722" As Nitrate compounds [RR-01770-9]

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): sn 0324

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): sn 3722

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): SN 3722 500 lb TPQ (water dissociable, Category Code N511)

### 15.8. California Proposition 65

Not listed.

### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): "Present" As Calcium nitrate [10124-37-5] (DSL)

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): Present (DSL)

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

**All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.**

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): "Present (ACTIVE)" As Nitric acid, calcium salt (2:1) [10124-37-5]

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): Present (ACTIVE)

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): "233-332-1" As Calcium nitrate [10124-37-5]

Calcium Nitrate Tetrahydrate (CAS # 13477-34-4): 233-332-1

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## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

Harmful if swallowed. Causes serious eye damage.

Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye protection.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. 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 CENTER or physician. Rinse mouth.

Dispose of contents in accordance with local, state, federal and international regulations.

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

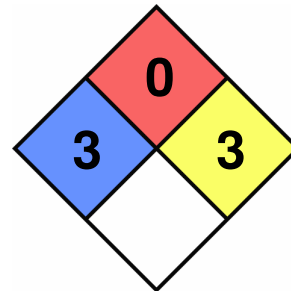
**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

**Biohazardous Infectious Materials Hazard Class:** Not Applicable.

### 16.3. National Fire Protection Association (NFPA) Rating

<b>Health:</b>	3
<b>Flammability:</b>	0
<b>Reactivity:</b>	3
<b>Special Hazard:</b>	



### 16.4. Document Revision

**Last Revision Date:** 2025-01-31

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and COLE-PARMER INSTRUMENT COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.