



SAFETY DATA SHEET

Name of Product:

CALCIUM NITRATE SOLUTION

Product #: I000067
Revision Date: July 27, 2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Calcium Nitrate Solution
SYNONYMS: Calcium nitrate; calcium nitrate tetrahydrate; hydrated calcium nitrate
PRODUCT CODES: I000067

MANUFACTURER: NACHURS ALPINE SOLUTIONS
DIVISION: Marion
ADDRESS: 421 Leader Street, Marion, OH43302, United States

PHONE: 800-622-4877 (USA)
800-265-2268 (CANADA)

EMERGENCY PHONE: United States: Chemtrec: 800-424-9300
Canada: CANUTEC: 1-613-996-6666
I TECH 877-324-4402

CHEMICAL NAME: Calcium Nitrate
CHEMICAL FAMILY: Inorganic
CHEMICAL FORMULA: $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$

SECTION 2: HAZARDS IDENTIFICATION

GHS ELEMENTS:

Hazard Classification: Eye Irritation (Category 2A).
Acute Toxicity Oral (Category 4).

Pictogram:



Signal Word: Warning

Hazard Statements: Causes serious eye irritation.
Harmful if swallowed.

Precautionary Statements: Wear protective gloves, clothing, eye and face protection.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
If in eyes, rinse cautiously with water for several minutes. Remove contacts if present and easy to do. Continue rinsing. Immediately call a poison center, doctor or physician and seek medical attention.
If swallowed, rinse mouth. Do NOT induce vomiting. Call a poison center, doctor or physician if you feel unwell.

POTENTIAL HEALTH EFFECTS

EYES: May cause moderate irritation, redness, and discomfort.
SKIN: May cause mild irritation and discomfort.
INGESTION: May cause irritation.
INHALATION: May cause moderate irritation, redness, and discomfort.

ACUTE HEALTH HAZARDS: Causes serious eye irritation. DO NOT get into eyes. Harmful if swallowed.

CHRONIC HEALTH HAZARDS: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

CARCINOGENICITY:

OSHA: N/A
ACGIH: N/A

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NTP: N/A
IARC: N/A
OTHER: N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	Calcium Nitrate tetrahydrate	30-72%	N/A	CAS# 13477-34-4
	Water	28-70%	N/A	CAS# 7732-18-5
SARA 313 REPORTABLE:	N/A			
OSHA PEL-TWA:	N/A			
OSHA PEL STEL:	N/A			
OSHA PEL CEILING:	N/A			
ACGIH TLV-TWA:	N/A			
ACGIH TLV STEL:	N/A			
ACGIH TLV CEILING:	N/A			

SECTION 4: FIRST AID MEASURES

EYES: Flush with water immediately and thoroughly for 15 minutes. If irritation persists, seek medical attention.
SKIN: Remove contaminated clothing and shoes. Wash skin with soap and water. If irritation persists, seek medical attention.
INGESTION: Do not induce vomiting unless directed by medical personnel to do so. Seek medical attention.
INHALATION: If inhaled, remove to fresh air. Seek medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: UPPER: N/A
(% BY VOLUME) LOWER: N/A

FLASH POINT:
F°: N/A
C°: N/A

METHOD USED: N/A

AUTOIGNITION TEMPERATURE:
F°: N/A
C°: N/A

NFPA HAZARD CLASSIFICATION:
HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 1
OTHER: 0

HMIS HAZARD CLASSIFICATION
HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 1
PROTECTION: B

EXTINGUISHING MEDIA: Water or media suitable for surrounding material.

SPECIAL FIRE FIGHTING PROCEDURES: Positive pressure self contained breathing apparatus should be used when there is a potential for inhalation of vapors and/or fumes.

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UNUSUAL FIRE AND EXPLOSION HAZARDS: May be combustible at high temperatures. Products of combustion may include oxides of nitrogen, NO, NO₂.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen, NO, NO₂.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Wear appropriate personal protective equipment as stated in Section 8. In the case of a spill, contain spill and maximize recovery. Mop up or pump up into plastic containers. Avoid contact with organic or easily oxidizable substances. Wash area with water.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store in suitable containers made of stainless steel, plastic or fiberglass in a cool, well ventilated area.

OTHER PRECAUTIONS: General safety and industrial hygienic practices should always be followed. Can support combustion of flammable materials when dry.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: N/A

VENTILATION: Provide adequate ventilation for local areas. If hazardous decomposition products are present use proper mechanical ventilation.

RESPIRATORY PROTECTION: Respiratory protection is not required under normal circumstances. If heated to evolve decomposition products, use appropriate protection. If misted by agitation or spray, use a mist respirator approved by NIOSH.

EYE PROTECTION: Safety glasses/goggles and full face shield.

SKIN PROTECTION: Chemical resistant gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: As required for surrounding area and risk assessment.

WORK HYGIENIC PRACTICES: Always follow good safety and industrial hygienic practices.

EXPOSURE GUIDELINES: See section 3.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear to slightly cloudy, nearly colorless liquid.

ODOR: No apparent odor.

ODOR THRESHOLD: No data available.

PHYSICAL STATE: Liquid.

pH AS SUPPLIED: 4.5-8.0

MELTING POINT: F°: N/A
C°: N/A

FREEZING POINT: F°: N/A
C°: N/A

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BOILING POINT:	F°: N/A C°: N/A
FLAMABILITY:	Not flammable.
FLASH POINT:	N/A
METHOD USED:	N/A
EVAPORATION RATE:	N/A
FLAMMABLE LIMITS IN AIR:	Not flammable.
VAPOR PRESSURE (mmHg):	No data available.
VAPOR DENSITY (AIR = 1):	No data available.
SPECIFIC GRAVITY (20°C):	1.27-1.52
DENSITY, LBS/GAL (20°C):	10.6-12.7
SOLUBILITY IN WATER:	Complete
PARTITION COEFFICIENT:	n-octanol/water – N/A
PERCENT SOLIDS BY WEIGHT:	30-72
PERCENT VOLATILE:	28-70
VOLATILE ORGANIC COMPOUNDS (VOC):	None
AUTOIGNITION TEMPERATURE:	N/A
THERMAL DECOMPOSITION:	N/A
VISCOSITY:	NA

SECTION 10: STABILITY AND REACTIVITY

	STABLE	UNSTABLE
STABILITY:	x	
CONDITIONS TO AVOID (STABILITY):	Extreme heat or fire.	
INCOMPATIBILITY (MATERIAL TO AVOID):	Reactive with combustible materials, acids, alkalis.	
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	Oxides of nitrogen, NO, NO ₂ .	
HAZARDOUS POLYMERIZATION:	Will not occur.	
CONDITIONS TO AVOID (POLYMERIZATION):	Elevated temperatures, fire, and oxidizable materials.	

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:	LD50 Oral Rat - >300 to <2000 mg/kg
	Skin Corrosion/Irritation – Rabbit – None.
	Serious Eye Damage/Eye Irritation – Rabbit – Risk of serious eye damage.

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SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Do not allow into drinking water.

Toxicity to Fish – LC50 *Oncorhynchus mykiss* (rainbow trout) - >98.9 mg/L (96 h)

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Reclaim and reuse as much as possible. Dispose in accordance with all federal, state, and local regulations.

RCRA HAZARD CLASS: N/A

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION:

PROPER SHIPPING NAME: Calcium Nitrate Solution

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENT: N/A

Health: 1 Flammability: 0 Reactivity: 1 Specific: None

WATER TRANSPORTATION:

PROPER SHIPPING NAME: Calcium Nitrate Solution

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENTS: N/A

Health: 1 Flammability: 0 Reactivity: 1 Specific: None

AIR TRANSPORTATION

PROPER SHIPPING NAME: Calcium Nitrate Solution

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENTS: N/A

Health: 1 Flammability: 0 Reactivity: 1 Specific: None

OTHER AGENCIES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

TSCA (TOXIC SUBSTANCE CONTROL ACT): Yes

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): No

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): No

311/312 HAZARD CATEGORIES: N/A

313 REPORTABLE INGREDIENTS: No

STATE REGULATIONS: Right to Know: PA, NJ

INTERNATIONAL REGULATIONS: N/A

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SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION: *Technical Services*

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