TRADEMARK NITROGEN

SAFETY DATA SHEET

C-Nite® CALCIUM NITRITE 30% SOLUTION

Section 1 – Identification

Product	C-Nite® Calcium Nitrite 30% Solution
Recommended Use:	As a corrosion inhibitor in concrete
Manufacturer	TradeMark Nitrogen Corp.
Address	1216 Old Hopewell Road, Tampa, FL 33619
Phone	(813) 626-1181 (800) 452-3107
24 Hour Emergency Contact	Chemtrec (800) 424-9300

Section 2 – Hazard Identification

GHS07

Signal Word: **WARNING**

Hazard Statements:

H302	Harmful if swallowed
H320	Causes eye irritation

Precautionary Statements:

P260	Do not breathe dust / fume / gas / mist / vapors / spray
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product

Section 3 – Composition

Ingredients	Component	CAS. No.	Percent by
	Calcium Nitrate $Ca(NO_3)_2$	10124-37-5	<3%
	Calcium Nitrite $Ca(NO_2)_2$	13780-06-8	29 - 31%
	Water (H_20)	7732-18-5	Balance

Section 4 – First Aid Measures

Inhalation	If inhaled: Remove person to fresh air and keep comfortable for breathing. Provide artificial respiration if necessary. Seek medical attention if necessary.
Skin Contact	If on skin (or hair): Take off all contaminated clothing. Rinse skin immediately with soap and water for at least 15 minutes. Seek medical attention if irritation persists.
Eye Contact	If in eyes: Rinse cautiously with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present and easy to do. Seek medical attention at once.
Ingestion	If swallowed: Immediately contact a physician or poison control center. Do NOT induce vomiting, unless advised by a medical professional. Drink one to two glasses of water. Never give anything by mouth to an unconscious person.
Acute Health Hazards	High levels of nitrates may reduce the bloods ability to transport oxygen causing headache, fatigue, dizziness and blue lips and skin (methemoglobinemia).
Chronic Health Hazards	Methemoglobinemia is the primary health effect, but possible excessive action of the kidneys and perhaps bowels can occur.

Section 5 – Fire Fighting Measures

Suitable Extinguishing Techniques & Equipment	Calcium Nitrite is an non-flammable aqueous solution and will not burn. However, if evaporated to dryness this product is an oxidizer and can sustain combustion. Extinguishing Media: Dry chemical, carbon dioxide, water fog.
Chemical Hazards From Fire	If product evaporates, residual solid may sustain combustion. Decompostion may yield calcium compounds and oxides of nitrogen.
Special Fire Fighting Procedures	Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.
NFPA Rating	Health - 2 (Moderate) Fire - 0 (Least) Reactivity - 0 (Least)
Other	Do not allow run-off from fire fighting to enter drains or water courses.

Section 6 – Accidental Release Measure

Personal Precautions	Avoid splashing. Prevent exposure to spilled material with the use of proper PPE.
Protective Equipment	PPE should include gloves, goggles, face shield and impervious clothing.
Containment	Control the flow of product using dikes of soil, sand bags or other commercially available inert sorbent socks or booms. Prevent entry into sewers, drains, underground or confined spaces, water intakes and waterways.
In Case of Spill	Absorb product with inert absorbent. Avoid splashing or spraying. Contain and pick up spill in diked area. Prevent discharge to sewers or water ways. Follow all local, state, ferderal and provincial laws and regulations for disposal.

Section 7 – Safe Handling & Storage

Precautions for Safe Handling & Storage	Open container carefully, as needed to relieve any build up of pressure. Do not get this material in your eyes, on your skin, or on your clothing. Do not inhale vapors or mists of this product. Use this product with adequate ventilation. Wash thoroughly after handling. Store in a well ventilated cool dry place. Do not freeze. Store away from direct sunlight and any sources of heat. Empty product containers may contain residue. Do not reuse empty containers. Do not store this material in open or unlabled containers.
Incompatibility	Avoid contact with ammonium salts, activated carbon, reducing agents, cyanides. Residue would be incompatible with combustible materials.

Section 8 – Exposure Controls / Personal Protection

Exposure Limits

Component	Permissible Exposure Limit	Threshold Limit Value	Short Term Exposure Limit	Immediately Dangerous to Life or Health
Calcium Nitrite	Not Established	Not Established	Not Established	Not Established
Calcium Nitrate	Not Established	Not Established	Not Established	Not Established
Water (H_2O)	Not Established	Not Established	Not Established	Not Established

Engineering Controls

Local or general exhaust. Eyewash facilities should be available.

Personal Protective Equipment

Eyes	Chemical safety goggles or safety glasses.
Hands	Impervious gloves.
Respiratory	None required under normal conditions. NIOSH approved respirator if there is a mist of the product.
Protective Clothing	Impervious chemical clothing


Gloves


Goggles


Safety Glasses

Section 9 – Physical & Chemical Properties

Appearance and Odor	Clear, light-yellow to colorless liquid with slight sweet odor.	Specific Gravity	1.27 - 1.29
Boiling Point	Approx. 226°F (108°C) at 1 atmosphere	Molecular Weight	N/A
Freezing Point	No Data Available	Solubility in Water	Complete (100%)
Vapor Pressure	No Data Available	Evaporative Rate	
Gallons per Ton		pH	8.5 - 9.5
Weight per Gallon		Salt-Out Temp	No Data Available
Flash Point	>200°F (>93° C)	Auto Ignition Temp	Not Flammable
Flammability Limits	No Data Available	LEL	No Data Available
		UEL	No Data Available

Section 10 – Stability & Reactivity

Reactivity	Product is not reactive under normal conditions.
Stability	Product is stable under normal conditions.
Hazardous Reactions	Hazardous polymerization will not occur.
Conditions to Avoid	Do not allow product to evaporate to dryness, product residue may act as an oxidizer and support combustion. Avoid extreme heat. Avoid incompatible materials.
Incompatible Materials	Avoid contact with ammonium salts, activated carbon, reducing agents, cyanides. Residue would be incompatible with combustible materials.
Hazardous Decomposition Products	Decomposition may yield calcium compounds and oxides of nitrogen.

Section 11 – Toxicology Information

Routes of Exposure	Inhalation, ingestion or skin/eye absorption	
Symptoms and Signs of Exposure	Eyes	Causes moderate eye irritation.
	Skin	Mild irritant.
	Inhalation	May irritate respiratory tract causing sneezing, cough and sore throat.
	Ingestion	If ingested this product will immediately cause burns to the mouth, throat, esophagus and possibly the digestive tract. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product may cause methemoglobinemia upon ingestion characterized by cyanosis, headache, dizziness, fatigue, nausea, vomiting, drowsiness, stupor, coma, and rarely death.
Acute Health Hazards	This product may be harmful or fatal if swallowed. This product is irritating to the eyes, respiratory system and skin. The nitrate component of this product may cause Methemoglobinemia.	
Long Term Effects	Methemoglobinemia is the primary long-term health effect. Repeated skin contact with this material may cause dermatitis.	
Toxicity	**Calcium Nitrite 13780-06-8**	
	Rat Oral Toxicity	LD_{50} 940 mg / kg
	Water (7732-18-5)	
	Rat Oral Toxicity	LD_{50} >90 mL / kg
Carcinogen	IARC: Monograph 94 posted (related to nitrates) Group 2A (probably carcinogenic to humans)	

Section 12 – Ecological Information

General Product Information	In high concentrations, this product may be harmful to either terrestrial and aquatic plant life				
Ecotoxicity	Aquatic Toxicity: Calcium Nitrate (10124-37-5)	96 Hr LC50 Leomis Macrochirus	120 Hr EC50 Daphnia Magna		
		10000 mg / L	2355 mg / L		
	Endpoint	**Test Duration**	**Species**	**Value**	**Source**
	EC50	48 hrs	Crustacea	45 mg/l	1
	LC50	96 hrs	Fish	>100 mg/l	1
	EC50	72 hrs	Algae or other aquatic plants	> 100 mg/l	1
	EC50(ECx)	48 hrs	Crustacea	45 mg/l	1
	*1: Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity				

Section 13 – Disposal Considerations

Waste	Calcium Nitrite is not considered a hazardous waste. Disposal must be done in accordance with local, state and federal environmental regulations. Place waste in an appropriate container with correct labeling.

Section 14 – Transport Information

This product is not classified as hazardous as defined by 49 CFR 172.101 by the US Department of Transportation

This product is not regulated as a hazardous material for transportation as defined by Canada's Transportation of Dangerous Goods Information.

Section 15 – Regulatory Information

United States - SARA Hazard Category	This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act (SARA) and is considered, under applicable definitions, to meet the following categories:					
	Fire - No	Pressure - No	Reactive - No	Acute - Yes	Chronic - No	
SARA Title III Information	This product contains the following substances subject to the reporting requirements of Title III (EPCRA) of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:					
	Chemical	CAS No.	CERCLA RQ (lbs	SARA Reporting		
				302	304	313
	Calcium Nitrite	13780-06-8	N/A	N/A	N/A	N/A
	Calcium Nitrate	10124-37-5	N/A	N/A	N/A	Yes(1)
	(1) - Thefollowing components are subject to reporting levels established by SARA Title III 313:					
		Calcium Nitrate	10124-37-5	>= 1 - < 5%		
CERCLA / Superfund, 40 CFR Part 117, 302	If this product contains components subject to substances designated as CERCLA reportable Quantity (RQ) Substances, it will be designated in the above table with the RQ value in pounds. If there is a release of RQ Substance to the environment, notification to the National Response Center, Washington DC (800-424-8802) is required.					
TSCA	All chemical substances in this product are either listed as Active on the TSCA inventory or are in compliance with a TSCA Inventory exemption.					

Section 16 – Other Information

Date of Issue	**1/21/2025**
Date of Revision	July 2024 SDS updated to reflect new pH range. May 2023 Aquatic toxicity data added. October 2022 formatting update. October 2019 Section 9 updated. June 2019 TSCA Statement revised to include the word 'Active'. SDS Created October 2018
Disclaimer	The information contained in this SDS refers only to the specific material designated and does not relate to any process or use with any other materials. This information is furnished free of charge and is based on data believed to be accurate and reliable as of the date hereof. It is intended for use by persons possessing technical knowledge at their own discretion and risk. Since actual use is beyond our control, no warranty, expressed or implied, and no liability is assumed by TradeMark Nitrogen Corp. in conjunction with the use of this information. Nothing herein is to be construed as a recommendation to infringe any patents. TradeMark Nitrogen Corp. assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.