

SAFETY DATA SHEET

46% SODIUM NITRATE Solution

Section 1 – Identification

Product 46% SODIUM NITRATE Solution

Manufacturer TradeMark Nitrogen Corp.

Address 1216 Old Hopewell Road, Tampa, FL 33619

Phone (813) 626-1181

24 Hour Chemtrec

Emergency (800) 424-9300

Contact

Recommended Use:

A component in several reactions carried out on industrial scales for the production of concrete admixtures, odor control in municipal waste water, and other uses

Section 2 – Hazard Identification



GHS07



GHS05

Signal Word: **WARNING**

Hazard Statements

H302 Harmful if swallowed

H315 Causes skin irritation

H320 Causes eye irritation

H371 May cause damage to organs (blood)

H402 Harmful to aquatic life

Precautionary

Statements:

P210 Keep away from open flames. - No Smoking

P220 Keep / Store away from combustible materials

P221 Take any precaution to avoid mixing with combustible materials

P260 Do not breathe fume, mist, spray, vapours

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P273 Avoid release to the environment

P280 Wear eye protection, protective clothing, protective gloves

P302+P352 IF ON SKIN: Wash with plenty of water

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P332+P313 If skin irritation occurs: Get medical advice / attention

P337+P313 If eye irritation persists: Get medical advice / attention

P362 Take off contaminated clothing

P370+P378 IN CASE OF FIRE: use water in large amounts, water spray for extinction

P405 Store locked up

P501 Dispose of contents / container according to local, regional, national, and international regulations

Section 3 – Composition

Ingredients	Component	CAS. No.	Percent by Weight
	Sodium Nitrate (NaNO ₃)	7631-99-4	45-47%
	Water (H ₂ O)	7732-18-5	59-61%

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 with soap and water for at least 15 minutes. Liquid is hot - may need to treat exposed person for burns.
Eye Contact	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.
Ingestion	If swallowed: Do NOT induce vomiting. Drink large amounts of water. Never give anything by mouth to an unconscious person. Seek medical attention.
Acute Health Hazards	High levels of nitrates may reduce the blood's 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	46% Sodium Nitrate is a non-flammable aqueous solution. Flooding quantity of water is recommended in the event of a fire.
Chemical Hazards From Fire	If product evaporates to dryness, the remaining solid residue may pose a slight fire hazard.
Special Fire Fighting Procedures	Sodium Nitrate is an oxidizer. Wear full protective clothing and positive-pressure seal-contained breathing apparatus.
NFPA Rating	Health - 1 (Slight) 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 level C protective suit.
Containment	Control the flow of product using dikes of soil, sand bags or other commercially available inert sorbent socks or booms.
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. If uncontaminated, recover and re-use.

Section 7 – Safe Handling & Storage

Precautions for Safe Handling & Storage	Use caution when handling/transferring. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist or vapor. Use only with adequate ventilation. Wear appropriate personal protective equipment. Transfer and storage should be compatible. Observe good industrial hygiene practices.
Incompatibility	Do not store above 120°F. Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed.

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
	Sodium Nitrate (NaNO ₃)	Not Established	Not Established	Not Established	Not Established
	Water (H ₂ O)	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 chemical protective gloves.			
	Respiratory	None required under normal conditions. NIOSH approved respirator if there is a mist of the product.			
	Protective Clothing				



Gloves



Goggles



Protective Clothing



Respiratory Protection

Section 9 – Physical & Chemical Properties

Appearance and Odor	Clear to pale yellow liquid with little to no detectable odor.	Specific Gravity	1.37 - 1.39 @ 68°F
Boiling Point	220°F (104°C)	Molecular Weight	84.99
Freezing Point	50°F (10°C)	Solubility in Water	Highly soluble in water
Vapor Pressure	No Data Available	Evaporative Rate	No Data Available
Weight per Gallon	11.4 - 11.6 lbs/gal @ 68°F	pH	5 - 7
Flash Point	Not Flammable	Salt-Out Temp	N/A
Flammability Limits	Not Applicable	Auto Ignition Temp	Not Flammable
UEL	No Data Available	LEL	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. Keep away from heat. Avoid heating within a confined space. Avoid incompatibilities, contamination and combustible materials
Incompatible Materials	Avoid contact with readily oxidizable materials, strong acids and chlorates.
Hazardous Decomposition Products	NOx (Nitrogen Oxide)

Section 11 – Toxicology Information

Routes of Exposure	Inhalation, ingestion or skin/eye absorption		
Symptoms and Signs of Exposure	Eyes	Causes eye irritation.	
	Skin	Mild irritant.	
	Inhalation	May irritate respiratory tract causing cough and sore throat.	
	Ingestion	Can cause abdominal pain, vomiting, diarrhea and methemoglobinemia.	
Long Term Effects	Methemoglobinemia is the primary long-term health effect.		
Toxicity	Sodium Nitrate		
	Rat Oral Toxicity (OECD Guide 401)	LD ₅₀	1276 mg/kg
Carcinogen	The International Agency for Research on Cancer has not classified sodium nitrate for its carcinogenic potential (IARC 1987).		

Section 12 – Ecological Information

Sodium Nitrate	7631-99-4	<u>Aquatic Toxicity Data:</u>
Persistence and degradability:	No Data Available	LC50 Gambusia affinis: 6650 mg/L - 96H
Bioaccumulative potential:	No Data Available	
Mobility in soil:	No Data Available	
Other adverse effects:	No Data Available	

Section 13 – Disposal Considerations

Waste	Sodium Nitrate 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.
Additional Information	This material is highly water soluble. Landfills receiving this material should be equipped to contain leachate.

Section 14 – Transport Information

DOT	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods

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					
	Chemical	CAS No.	CERCLA RQ (lbs.)	SARA Reporting		
				302	304	313
	Sodium Nitrate	7631-99-4	N/A	N/A	N/A	Yes ⁽¹⁾
	⁽¹⁾ As nitrate compounds (water dissociable)					
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	Sodium Nitrate salt is listed on the TSCA inventory.					

Section 16 – Other Information

Issue Date:	7/29/2025
Date of Revision	July 2025 SDS Section 9 technical data updated. June 2025 SDS updated physical and chemical properties in Section 9. March 2024 revision prepared in accordance with 29 CFR 1910.1200 Appendix D to meet Global Harmonization Standards.
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