TRADEMARK NITROGEN

SAFETY DATA SHEET

MAGNESIUM NITRATE SOLUTION

Section 1 – Identification

Product	Magnesium Nitrate Solution	Recommended Use: Used in the production of fertilizers.
Manufacturer	TradeMark Nitrogen Corp.	
Address	1216 Old Hopewell Road, Tampa, FL 33619	
Phone	(813) 626-1181	
24 Hour Emergency Contact	Chemtrec (800) 424-9300	

Section 2 – Hazard Identification



GHS07

Signal Word: **WARNING**

Hazard Statements

H302 Harmful if swallowed
H320 Causes serious eye irritation
H335 May cause respiratory irritation

Precautionary Statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103 Read label before use
P210 Keep away from open flames. - No Smoking
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
P271 Use only outdoors or in a well-ventilated area
P280 Wear eye protection, protective clothing, protective gloves
P331 Do NOT induce vomiting
P301+P330 IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell
P302+P352 IF ON SKIN: Wash with plenty of water
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
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
P501 Dispose of contents / container according to local, regional, national, and international regulations

Section 3 – Composition

Ingredients	Component	CAS. No.	Percent by Weight
	Magnesium Nitrate Anhydrous $Mg(NO_3)_2$	10377-60-3	38.45%
	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 with soap and water for at least 15 minutes. Seek medical attention if irritation persists. Wash contaminated clothing before reuse.
Eye Contact	If in eyes: Immediately rinse 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 bloods ability to transport oxygen causing headache, fatigue, dizziness and blue lips and skin (methemoglobinemia). Moderate irritant of eyes, skin, mucous membranes, and contaminated tissue. Prolonged contact can result in tissue damage which could lead to blindness. Ingestion can be harmful or fatal.
Chronic Health Hazards	Methemoglobinemia is the primary health effect. Prolonged skin contact may result in dermititus (inflamation and redness of skin). Repeated ingestion of small amounts may cause weakness, depression, headaches, neurological effects and mental impairment.

Section 5 – Fire Fighting Measures

Suitable Extinguishing Techniques & Equipment	Magnesium Nitrate Solution is noncombustible under normal conditions. However, the nitrate component possesses oxidizing properties and may contribute to the intensity of a fire if the solution becomes concentrated or dries as a result of prolonged heating. Water spray is recommended. Halon, foam, dry chemical, CO2 or any ABC class extinguisher are acceptable. Wear self-contained breathing apparatus and full protective gear.
Chemical Hazards From Fire	In a fire this material may decompose and produce acrid vapors, magnesium compounds and oxides of nitrogen.
Special Fire Fighting Procedures	Use extinguishing agent most appropriate to surrounding materials.
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 and protective clothing.
Containment	Avoid release to environment. 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	Store in a well ventilated cool dry place. Containers should be kept closed and properly labeled.
Incompatibility	Flammable and comustible materials, strong reducing agents and strong acids, finely powdered metals.

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
Magnesium Nitrate (Mg(NO3)2)	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 and emergency shower 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


Protective Clothing


Goggles


Respiratory Protection

Section 9 – Physical & Chemical Properties

Appearance and Odor	Colorless to slightly yellowish liquid with little to no detectable odor.	Specific Gravity	1.359
Boiling Point	> 212°F at 1 atmosphere	Molecular Weight	256.41 g/mol
Freezing Point	< 5°F	Solubility in Water	Completely miscible
Vapor Pressure	Similar to water	Flash Point	Not applicable
Weight per Gallon	11.33 lbs/gal @ 68°F	pH	3.5 - 5.0
Gallons per Ton	177.6	Salt-Out Temp	15°F
Flammability Limits	Not applicable	Auto Ignition Temp	Not applicable
UEL	Not applicable	LEL	Not applicable

Section 10 – Stability & Reactivity

Reactivity	Product is not reactive under normal conditions. Avoid interaction with heat (flames), oxidizers, acids or alkalis.
Stability	Product is stable under normal conditions.
Hazardous Reactions	None known. Hazardous polymerization will not occur.
Conditions to Avoid	Avoid contact with extreme heat and incompatible materials.
Incompatible Materials	Avoid contact with readily oxidizable materials, strong acids, strong reducing agents, alkalis and finely powdered metals.
Hazardous Decomposition Products	Extreme heat may cause decomposing to acrid vapors, magnesium compounds and nitrogen oxides.

Section 11 – Toxicology Information

Routes of Exposure	Inhalation, ingestion or skin/eye absorption	
Symptoms and Signs of Exposure	Eyes	Mild eye irritation.
	Skin	Mild irritant.
	Inhalation	May irritate respiratory tract and mucous membranes.
	Ingestion	Can cause abdominal pain, vomiting, diarrhea and methemoglobinemia.
Long Term Effects	Methemoglobinemia is the primary long-term health effect of over-exposure.	
Toxicity	No limits have been set for this material.	
	Rat Oral Toxicity	LD_{50} 5,440 mg/kg (Magnesium Nitrate component; published reference value)
Carcinogen	The International Agency for Research on Cancer has not classified Magnesium Nitrate for its carcinogenic potential (IARC 1987).	

Section 12 – Ecological Information

Water	High concentrations may be harmful to fish and other aquatic organisms.
Ecotoxicity	No Data Available
Persistence and Degradability	No Data Available
Bioaccumulative potential	This product is not bioaccumulative
Mobility in soil	No Data Available
Other adverse effects	No Data Available

Section 13 – Disposal Considerations

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	Dispose of used containers at an approved waste handling facility. Empty containers may contain residue of the product, follow label warnings even after container is emptied.

Section 14 – Transport Information

DOT	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
Special Precautions	None Known
STCC Code	2871313

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 - No 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
Magnesium Nitrate	10377-60-3	N/A	N/A	N/A	N/A

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

Magnesium Nitrate is a hydrated form of Nitric Acid, Magnesium Salt, which is listed on the Active TSCA inventory.

Section 16 – Other Information

Issue Date **11/16/2026**

Date of Revision

November 2026 Section 5 updated with more concise detail. July 2026 Section 9 updated technical data. February 2024 SDS updated to include STCC code. April 2023 salt out temp updated and pH adjusted. June 2019 TSCA Statement revised to include the word 'Active'. May 1, 2019 SDS updated to meet GHS Requiements. June 2018 SDS format updated. October 2017 SDS update to meet GHS Standards. August 2014 TSCA statement revised. February 2013 revision prepared in accordance with 29 CFR 1910.1200 Appendix D to meet Global Harmonization Standards.

Disclaimer

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