SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and company/undertaking

1.1 Product identifiers

Product name: Magnesium Nitrate 66.7% Solution

CAS number: See section 3

Synonyms: None

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Utilized in a variety of industrial chemical processes.

1.3 Details of the supplier of the safety data sheet

Company

Lab Alley, LLC
12501 Pauls Valley Road, Suite A,
Austin, TX 78737 U.S.A

Telephone 512-668-9918
Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone # US & Canada: 1-800-535-5053 INFOTRACK
International 1-352-323-3500 INFOTRACK

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

2.2 GHS label elements including precautionary statements.

Pictogram

Signal word: Warning

Hazard Statement

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

SECTION 3: Composition/information on ingredients

Chemical name	Common name	CAS number	Concentration by weight
Magnesium Nitrate Hexahydrate $Mg(NO_3)_2 \cdot 6H_2O$		13446-18-9	66.7%
Water, H_2O		7732-18-5	33.3%

SECTION 4: First aid measures

If inhaled: Remove person to fresh air and keep comfortable for breathing. Provide artificial respiration if necessary. Seek medical attention if necessary.

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.

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.

If swallowed: Do NOT induce vomiting. Drink large amounts of water. Never give anything by mouth to an unconscious person. Seek medical attention.

Acute: 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: 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: Firefighting measures

Suitable Extinguishing Techniques & Equipment

Not combustible or reactive but can contribute to the intensity of the fire. Water spray is recommended. Halon, foam, dry chemical, CO_2 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.

NFPA Rating

Health - 1 (Slight)

Fire - 0 (Least)

Reactivity - 0 (Least)

Other : Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6: Accidental release measures

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: Handling and 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 (H2O)	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.			

SECTION 9: Physical and chemical properties

Appearance and Odor: Colorless to slightly yellowish liquid with little to no detectable odor.

Boiling Point: > 212°F at 1 atmosphere

Freezing Point: < 5°F

Vapor Pressure: No Data Available

Weight per Gallon: 11.33 lbs/gal @ 68°F

Gallons per Ton: 176.5

Flammability Limits: No Data Available

UEL: No Data Available

Specific Gravity: 1.359

Molecular Weight: No Data Available

Solubility in Water: No Data Available

Flash Point: Not flammable

pH: 3.5 - 5.0

Salt-Out Temp: 21°F (-6.1°C)

Auto Ignition Temp: Not Flammable

LEL: No Data Available

SECTION 10: Stability and 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: Keep away from direct heat sources. Avoid heating within a confined space. Avoid incompatibilities and contamination. Avoid extreme heat and protect 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: Toxicological 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: LD50 5,440 mg/kg

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

Bio accumulative potential: This product is not bio accumulative

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(US)

Not regulated as dangerous goods

TDG

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 - 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	13446-18-9	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

Date of issue: 3/5/2024

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.