

# SAFETY DATA SHEET

## Nutrisulfate® LT Liquid



Revision Date: 4/19/2022  
Version 1.2

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Product Identifier

Product Name: Nutrisulfate® LT Liquid

Synonyms: Sulfate-Enhanced Remediation Product, Epsom Salt, Magnesium Sulfate Heptahydrate

Product Form: Solution

#### Recommended use of the chemical and restrictions on use

Recommended Use: Remediation of contaminated groundwater and soils.

Restrictions on Use: Use as recommended by the label.

#### Details of the supplier and of the safety data sheet

Supplier: Tersus Environmental, LLC  
1116 Colonial Club Rd  
Wake Forest, NC 27587  
Phone: +1-919-453-5577  
Email: [info@tersusenv.com](mailto:info@tersusenv.com)

#### Emergency telephone number

For leak, fire, spill or accident emergencies, call:

+1-919-453-5577 (Tersus Office Hours, 8:00 AM to 5:00 PM Eastern)

+1-919-638-7892 (Tersus Outside office hours)

+1-800-424-9300 (Chemtrec 24 Hour Service – Emergency Only)

+1-703-527-3887 (Chemtrec Outside United States 24 Hour Service – Emergency Only)

### 2. HAZARD IDENTIFICATION

#### **Classification of the substance or mixture**

This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### **Emergency Overview**

The product contains no substances which at their given concentration, are considered hazardous to health.

| Appearance | Physical State | Odor |
|------------|----------------|------|
| Clear      | Liquid         | None |

Causes mild irritation to the eyes.

No known adverse effects.

Causes nausea, vomiting, abdominal cramps, and diarrhea.

Spilled material can be slippery.

#### **Hazards not otherwise classified (HNOC)**

#### **Other Information**

Unknown Acute Toxicity: 100% of the mixture consists of ingredient(s) of unknown toxicity.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Chemical Formula** Mixture**Hazardous Components**

This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.

**Components**

| <b>Chemical Name</b>            | <b>Concentration (%)</b> | <b>CAS Number</b> |
|---------------------------------|--------------------------|-------------------|
| Magnesium sulfate, heptahydrate | 25-30%                   | 10034-99-8        |
| Water                           | 70-75%                   | 732-18-5          |

Synonyms are provided in Section 1.

Occupational exposure limits, if available, are listed in Section 8.

**4. FIRST AID MEASURES**

|  |  |
|--|--|
| General Information  | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Give psychological aid. Keep the victim calm, avoid physical strain. Take victim to a doctor if irritation persists.<br><br>Remove affected person from source of contamination. |
| Eye Contact  | Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.   |
| Skin Contact   | May cause an allergic skin reaction. Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.   |
| Inhalation   | If inhaled: remove person to fresh air. Seek medical attention if you feel unwell.   |
| Ingestion  | Rinse out mouth with water. Health injuries are not known or expected under normal use.  |
| Most important symptoms and effects, both acute and delayed                | Information not available  |
| Indication of any immediate medical attention and special treatment needed | If exposed or concerned, get medical advice and attention.   |

**5. FIRE-FIGHTING MEASURES**

|  |   |
|--|---|
| <b>Suitable Extinguishing Media</b>                          | Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ). |
| <b>Specific Hazards Arising from the chemical or mixture</b> | During fire, gases hazardous to health may be formed.                           |

|   |   |
|---|---|
| <b>Special Fire Fighting Procedures</b> | This material is non-combustible. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
|---|---|

**6. ACCIDENTAL RELEASE MEASURES**

|   |  |
|---|--|
| <b>Personal Precautions</b>                 | Provide enough ventilation. Advice for emergency responders: protective equipment see Section 8. Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke or use open fire or other sources of ignition. Contact with walking surface may result in formation of slippery film/falling hazard.                                 |
| <b>First Aid:</b>                           | In case of contact with skin, wash with soap and water. If symptoms occur, seek medical attention. In case of contact with eyes, rinse with plenty of water for at least 15 minutes and see an eye specialist if irritation persists. In case of inhalation, remove to fresh air. In case of ingestion, drink water. If symptoms occur, seek medical assistance. |
| <b>Environmental Precautions</b>            | Sinks and mixes with water. No adverse effects known. Prevent further leakage or spillage if safe to do so.  |
| <b>Methods for Containment and Clean Up</b> | For large spill cleanup: Keep unnecessary people away; isolate hazard area and deny entry. Do not touch walk through spilled material. Sweep, scoop, or vacuum discharged material. Flush residue with water. Observe environmental regulations.   |

**7. HANDLING AND STORAGE**

|   |   |
|---|---|
| <b>Precautions for safe handling</b>                                | Avoid breathing dust. Promptly clean up spills.   |
| <b>Hygiene measures</b>   | Handle in accordance with good industrial hygiene and safety procedures. Use good personal hygiene practices.                     |
| <b>Conditions for safe storage, including any incompatibilities</b> | Keep containers closed and protected from extremes of temperature and humidity during storage. Recommended storage conditions 68- |

**8. EXPOSURE CONTROL / PERSONAL PROTECTION**

**Control parameters**

Exposure guidelines, ingredients with workplace control parameters.

| Name              | CAS-No     | TLV (ACGIH)               | PEL (OSHA)           |
|-------------------|------------|---------------------------|----------------------|
| Magnesium sulfate | 10034-99-8 | Information not available | No Established Limit |

**Exposure Control**

**Protective equipment**



**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to

|                                       |   |
|---------------------------------------|---|
| <b>Eye/face protection</b>            | an acceptable level<br>The following protection should be worn: Safety glasses with shields, chemical splash goggles or face shield.  |
| <b>Respiratory protection</b>         | In case of insufficient ventilation, wear suitable respiratory equipment  |
| <b>Hand protection</b>                | For prolonged or repeated skin contact use suitable protective gloves.  |
| <b>Other skin and body protection</b> | Wear suitable protective clothing   |
| <b>Hygiene measures</b>               | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|   |   |
|---|---|
| Appearance                                    | Liquid  |
| Odor  | Odorless                                      |
| Odor threshold                                | Information Not Available                     |
| pH  | Not measured                                  |
| Melting point /Freezing Point                 | 2055.2 °F (1124 °C)                           |
| Initial Boiling point and boiling point range | Unknown                                       |
| Flash Point                                   | Unknown                                       |
| Evaporation rate                              | Unknown                                       |
| Flammability (solid; gas)                     | Unknown                                       |
| Upper/lower flammability or explosive limits  | Unknown                                       |
| Vapor pressure                                | < 0 kPa at 25 °C < 0.13 hPa at 20°C estimated |
| Vapor density                                 | Unknown                                       |
| Specific gravity                              | 1.25 – 1.35                                   |
| Solubility (ies)                              | 246 g/l at 20 °C estimated                    |
| Partition coefficient: n-octanol/water        | Does Not Apply                                |
| Initial Boiling point and boiling point range | Does Not Apply                                |
| Auto-ignition temperature                     | Unknown                                       |
| Decomposition temperature                     | Unknown                                       |
| Viscosity                                     | Unknown                                       |

## 10. STABILITY AND REACTIVITY

|   |   |
|---|---|
| <b>Reactivity</b>                         | Stable under normal conditions and use.   |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                       |
| <b>Conditions to avoid</b>                | Contact with incompatible materials.  |
| <b>Incompatible materials</b>             | Strong oxidizing agents.  |
| <b>Hazardous decomposition products</b>   | At very high temperatures, magnesium oxide, sulfur dioxide, and sulfur trioxide may be generated. |

**11. TOXICOLOGICAL INFORMATION****Acute Toxicity**

|   |   |
|---|---|
| Acute toxicity                                      | 100% of the mixture consists of ingredient(s) of unknown toxicity |
| Skin Corrosion/Irritation                           | Information Not Available   |
| Serious Eye<br>Damage/Irritation                    | Information Not Available   |
| Respiratory or Skin<br>Sensitization                | Information Not Available   |
| Ingestion   | Information Not Available   |
| Germ Cell Mutagenicity                              | Information Not Available   |
| Carcinogenicity                                     | Information Not Available   |
| Reproductive Toxicity                               | Information Not Available   |
| Specific Target Organ<br>Toxicity – Single Exposure | Information Not Available   |
| Specific Organ Toxicity –<br>Repeated Exposure      | Information Not Available   |
| Aspiration Hazard                                   | Information Not Available   |
| General Remarks                                     | Information Not Available   |

**12. ECOLOGICAL INFORMATION****Chemical Fate Information**

Information Not Available

**Biodegradability**

Readily degradable.

Excess product in waterways may encourage eutrophication.

**13. DISPOSAL CONSIDERATIONS****Waste Disposal Methods**

Dispose according to federal, state and local laws. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Authority. Waste is suitable for incineration.

**14. TRANSPORTATION INFORMATION****U.S. (D.O.T.)**

|                       |   |
|-----------------------|---|
| Proper Shipping Name: | Chemicals not otherwise indexed (NOI) nonhazardous. |
| Hazard Class:         | Not applicable                                      |
| UN/NA:                | Not applicable                                      |
| Labels:               | Not applicable                                      |

**Canada (T.D.G.)**

|                       |   |
|-----------------------|---|
| Proper Shipping Name: | Chemicals not otherwise indexed (NOI) nonhazardous. |
| Hazard Class:         | Not applicable                                      |
| UN/NA:                | Not applicable                                      |
| Labels:               | Not applicable                                      |

**IMDG**

|                       |   |
|-----------------------|---|
| Proper Shipping Name: | Chemicals not otherwise indexed (NOI) nonhazardous. |
| Hazard Class:         | Not applicable                                      |
| UN/NA:                | Not applicable                                      |
| Labels:               | Not applicable                                      |

**IATA**

|                       |   |
|-----------------------|---|
| Proper Shipping Name: | Chemicals not otherwise indexed (NOI) nonhazardous. |
| Hazard Class:         | Not applicable                                      |
| UN/NA:                | Not applicable                                      |
| Labels:               | Not applicable                                      |

|                                   |
|-----------------------------------|
| <b>15. REGULATORY INFORMATION</b> |
|-----------------------------------|

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute health hazard               | No |
| Chronic Health Hazard             | No |
| Fire hazard                       | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard                   | No |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

|                              |
|------------------------------|
| <b>16. OTHER INFORMATION</b> |
|------------------------------|

Components not precisely identified are proprietary or non-hazardous.

**Disclaimer:** The information contained in this Safety Data Sheet (SDS), as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions are made without warranty, express or implied, or guarantee. Tersus Environmental, LLC urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. Since we cannot control

the application, use or processing of the product, we do not accept responsibility. Therefore, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product and assure that the intended use of the product will not infringe in any party's intellectual property right. The information presented here pertains only to the product as shipped.

All recommendations for the use of our products, whether given by us, orally or to be implied from data or lab tests results by us, are based on the current state of our knowledge at the time those recommendations are made. When additional information is obtained, these recommendations may be updated. They may also be influenced by circumstances outside our control. Notwithstanding, such recommendation the user is responsible that the product as supplied by us is suitable to the process or purpose he/she intends to use it.

Due to the proliferation of sources for information such as manufacturer specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.



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**End of Safety Data Sheet**