



### I. Product and Company Information

|   |   |                    |           |
|---|---|--------------------|-----------|
| <b>Product Name:</b>  | Magnesium Sulfate Solution  | <b>Synonym:</b>    | MAG       |
| <b>Chemical Name:</b>   | Magnesium Sulfate   | <b>CAS Number:</b> | 7487-88-9 |
| <b>Manufacturer's Name:</b><br>Southern Ionics Incorporated<br>579 Commerce Street<br>West Point, MS 39773<br>Customer Service: 1-800-953-3585<br>Web Site <a href="http://www.southernionics.com">www.southernionics.com</a> | <b>Emergency Contacts:</b><br>Afterhours (Southern Ionics) 1-888-610-2379<br><br>For Chemical Emergency, Spill or Accident<br>Call CHEMTREC at 1-800-424-9300<br>CHEMTREC CCN - 20596 |                    |           |

### II. Hazard Identification

|  |                                    |  |  |
|--|------------------------------------|--|--|
| <b>OSHA HCS / GHS Classification(s):</b>                                       |                                    | <b>Hazard Statement(s):</b>                      |  |
| Not classified under GHS Rules   |                                    | May cause mild eye irritation.                   |  |
| The dry or solid form of this chemical maybe classified in some jurisdictions. |                                    | May be harmful if inhaled.                       |  |
|  |                                    | May be harmful if swallowed.                     |  |
|  |                                    |  |  |
| <b>Signal Word:</b>  | <b>Precautionary Statement(s):</b> |  |  |
| Not Applicable   | <b>Prevention:</b>                 | See Section VIII. Personal Protective Equipment. |  |
| <b>Symbol(s):</b><br>Not Applicable  | <b>Response:</b>                   | See Section IV. First Aid Measures.              |  |
|  |                                    |  |  |

### III. Composition / Information on Ingredients

| <b>Chemical Name:</b>                  | <b>CAS Reg #'s</b> | <b>%</b> |
|--|--------------------|----------|
| Magnesium Sulfate (MgSO <sub>4</sub> ) | 7487-88-9          | 17-28    |
| Water                                  | 7732-18-5          | Balance  |

### IV. First Aid Measures

|                       |   |
|-----------------------|---|
| <b>Eyes:</b>          | Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Check for and remove any contact lenses. Seek medical attention, if you feel unwell.                         |
| <b>Dermal / Skin:</b> | Remove contaminated clothing and wash exposed area thoroughly with soap and water. Seek medical attention, if you feel unwell.  |
| <b>Inhalation:</b>    | Move to fresh air immediately. If breathing is difficult, give oxygen. Seek medical attention, if you feel unwell.  |
| <b>Ingestion:</b>     | If large amounts of this material are swallowed, DO NOT induce vomiting unless directed to do so by a physician. If small amounts of this material are swallowed, rinse mouth and seek medical attention, if you feel unwell. |

### V. Fire Fighting Measures

|  |   |            |                     |                              |
|--|---|------------|---------------------|------------------------------|
| <b>NFPA Hazard Rating:</b>   | Health (Blue)   | Fire (Red) | Reactivity (Yellow) | Special Instructions (White) |
|  | 1   | 0          | 0                   | None                         |
| <b>NFPA Hazard Classification: 0 = Least 1=Slight 2= Moderate 3= High 4= Extreme</b> |   |            |                     |                              |
| <b>Extinguishing Media:</b>  | Use extinguishing media appropriate for surrounding fire.   |            |                     |                              |
| <b>Special Firefighting Procedure:</b>   | Wear NIOSH-approved self-contained breathing apparatus (SCBA). Use water spray to keep containers cool and to knock down fumes. |            |                     |                              |

### VI. Accidental Release Measures

|   |  |
|---|--|
| <b>Precaution if Spilled or Released:</b> | Steps should be taken to contain spilled liquids and prevent discharges to streams or sewer systems. |
| <b>Neutralizing Chemicals:</b>            | None   |

### VII. Handling and Storage

|                  |   |
|------------------|---|
| <b>Handling:</b> | Handle all chemicals with respect. Keep separated from incompatible substances. Handle only with equipment, materials and supplies specified by their manufacturer as being compatible and appropriate for use with this product.   |
| <b>Storage:</b>  | Store at appropriate temperature to protect from freezing or crystallization. Consult the appropriate SII Product Bulletin for temperature recommendations. Do not store this material near food, animal feed, or drinking water. Store in well ventilated area. Store away from excessive heat (e.g. steam pipes, radiators), and from reactive materials. Keep container tightly closed when not in use |

### VIII. Exposure Control / Personal Protective Equipment

|   |   |                    |                          |              |
|---|---|--------------------|--------------------------|--------------|
| <b>Component Workplace Control Parameters:</b>                                      |   |                    |                          |              |
| <b>Components:</b>  | <b>CAS-No.</b>  | <b>Value</b>       | <b>Parameters</b>        | <b>Basis</b> |
| No Data Available   |   |                    |                          |              |
| <b>Engineering Controls:</b>  | Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.   |                    |                          |              |
| <b>General Hygiene:</b>   | Practice good personal hygiene after using this material, especially before eating, drinking, smoking, or using the toilet.   |                    |                          |              |
| <b>Personal Protection Equipment:</b>   |   |                    |                          |              |
| <b>Eye:</b>   | Use chemical splash goggles and face shield.  |                    |                          |              |
| <b>Skin:</b>  | Chemically resistant gloves should be worn whenever this material is handled.   |                    |                          |              |
| <b>Respiratory:</b>   | None required under normal conditions.  |                    |                          |              |
| <b>Other Protective Items:</b>  | Where splash is possible, full chemically resistant protective clothing and boots are recommended. Ensure that eyewash stations and safety showers are proximal to the work-station location. |                    |                          |              |
| <b>HMIS Classification:</b>   | Health (Blue)   | Flammability (Red) | Physical Hazard (Yellow) | PPE (White)  |
|   | 1   | 0                  | 0                        | See Above    |
| <b>Hazard Classification: 0 = Minimal 1=Slight 2= Moderate 3= Serious 4= Severe</b> |   |                    |                          |              |

### IX. Physical and Chemical Properties

|  |                             |                                |                              |
|--|-----------------------------|--------------------------------|------------------------------|
| <b>Physical State:</b>                     | Liquid                      | <b>pH:</b>                     | 5.0 to 8.0                   |
| <b>Appearance:</b>                         | Light colorless solution    | <b>Molecular Weight:</b>       | 120 for MgSO <sub>4</sub>    |
| <b>Odor:</b>                               | Odorless                    | <b>Odor Threshold:</b>         | No Data Available            |
| <b>Specific Gravity:(H<sub>2</sub>O=1)</b> | 1.18 to 1.32<br>@ 77°F/25°C | <b>Weight per Gallon:</b>      | 9.8 to 11.0 lbs.@ 77°F/ 25°C |
| <b>Vapor Density: (Air=1)</b>              | Similar to water            | <b>Vapor Pressure:</b>         | Similar to water             |
| <b>Boiling Point:</b>                      | 220°F/ 104°C                | <b>Freezing/Melting Point:</b> | 28°F/ -2°C                   |
| <b>Lower Explosive Limit:</b>              | Not Applicable              | <b>Upper Explosive Limit:</b>  | Not Applicable               |
| <b>Flash Point:</b>                        | Not Applicable              | <b>Autoignition Temp:</b>      | Not Applicable               |
| <b>Solubility in water:</b>                | Appreciable                 |                                |                              |
| <b>Other:</b>                              |                             |                                |                              |

### X. Stability and Reactivity Data

|   |   |
|---|---|
| <b>Chemical Stability:</b>                  | Product is stable under normal or expected use. |
| <b>Conditions To Avoid:</b>                 | None  |
| <b>Incompatible Materials:</b>              | None  |
| <b>Hazardous products of Decomposition:</b> | None  |

### XI. Toxicological Information

|                                       |   |             |              |                |
|---------------------------------------|---|-------------|--------------|----------------|
| <b>Routes of Entry:</b>               | <input checked="" type="checkbox"/> Eyes <input type="checkbox"/> Skin <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/> Inhalation |             |              |                |
| <b>Sign and symptoms of Exposure:</b> | No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.                                       |             |              |                |
| <b>Eye Contact:</b>                   | May cause irritation.   |             |              |                |
| <b>Ingestion:</b>                     | May be harmful if swallowed.  |             |              |                |
| <b>Skin Contact:</b>                  | No known adverse effects.   |             |              |                |
| <b>Inhalation:</b>                    | May cause respiratory tract irritation.   |             |              |                |
| <b>Carcinogenicity:</b>               | <b>NPT</b> Not Listed <b>IARC</b> Not Listed <b>OSHA</b> Not Regulated  |             |              |                |
| <b>Ingredient Name</b>                | <b>Species</b>  | <b>Test</b> | <b>Route</b> | <b>Results</b> |
| No Data Available                     |   |             |              |                |
| <b>Comments:</b>                      | When tested for primary irritation potential, this material caused mild eye irritation.   |             |              |                |

### XII. Ecological Information

| <b>Ingredient Name</b> | <b>Species</b> | <b>Test</b> | <b>Period</b> | <b>Results</b> |
|------------------------|----------------|-------------|---------------|----------------|
| Magnesium Sulfate      | Fathead minnow | 2820 mg/l   | 96 hrs        | LC50           |
| Magnesium Sulfate      | Daphnia magna  | 343 mg/l    | 48 hrs        | LC50           |
| <b>Comments:</b>       |                |             |               |                |

### XIII. Disposal Considerations

|                        |  |
|------------------------|--|
| <b>Waste Disposal:</b> | Always dispose of material in accordance with local, state, and federal regulations. |
|------------------------|--|

### XIV. Transportation Information

|                               |   |                       |     |                      |     |
|-------------------------------|---|-----------------------|-----|----------------------|-----|
| <b>Proper Shipping Name:</b>  | Magnesium Sulfate Solution  |                       |     |                      |     |
| <b>DOT Classification:</b>    | This material is not regulated hazardous material for transportation. |                       |     |                      |     |
| <b>Identification Number:</b> | N/A   | <b>Packing Group:</b> | N/A | <b>Other Labels:</b> | N/A |
|                               |   |                       |     |                      |     |
|                               |   |                       |     |                      |     |

## XV. Regulatory Information

| Inventory Status:          |            | US Regulations:    |   |
|----------------------------|------------|--------------------|---|
| U. S. TSCA                 | Yes        | SARA 302 TPQ       | Not Listed  |
| Europe EINECS              | Yes        | SARA 304 RQ        | Not Listed  |
| Canadian DSL               | Yes        | SARA 313 List      | Not Listed  |
| Japan ENCS                 | Yes        | CERCLA (RQ)        | Not Listed  |
| Korean KECI                | Yes        | RCRA 261.33        | Not Listed  |
| Philippines PICCS          | Yes        |                    |   |
| Australian AICS            | Yes        |                    |   |
|                            |            | SARA 311/312       | <input checked="" type="checkbox"/> Acute <input type="checkbox"/> Chronic <input type="checkbox"/> Fire <input type="checkbox"/> Release of Pressure <input type="checkbox"/> Reactive |
| International Regulations: |            | Other Regulations: |   |
| Canada WHMIS               | Not Listed | California PROP 65 | No  |
|                            |            | FDA- GRAS          | 21 CFR 184.1443   |
| EINECS                     | 231-867-5  |                    |   |

## XVI. Other Information

|                           |  |
|---------------------------|--|
| <b>NSF Certification:</b> | _____  |
| <b>Other:</b>             | _____  |
| <b>Revision Notes:</b>    | _____  |
| <b>MSDS Replacements:</b> | <u>SII MSDS - 006 Magnesium Sulfate Solution and SII MSDS - 017 Magnesium Sulfate Solution</u> |

**For Product Information:**

TEL: 662-494-3055  
FAX: 662-494-2828

**SALES OFFICE**

Post Office Drawer 1217  
West Point, MS 39773

**To Place An Order:**

TEL: 800-953-3585  
FAX: 800-953-3588

**IMPORTANT**

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