

## Magnesium Sulfate, Anhydrous, USP

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Magnesium Sulfate, Anhydrous, USP

**Synonyms/Generic Names:** Magnesium sulphate

**Product Number:** 3297

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information:** 920-623-2140 (Monday-Friday 8:00-4:30)  
[www.columbuschemical.com](http://www.columbuschemical.com)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Hazard Not Otherwise Classified (HNOC):** None

**Signal Words:** None

**Pictograms:** None

**GHS Classification:**

Not a dangerous substance according to GHS

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

None

**Precautionary Statements:**

None

#### Potential Health Effects

|                   |   |
|-------------------|---|
| <b>Eyes</b>       | May cause eye irritation.   |
| <b>Inhalation</b> | May be harmful if inhaled. May cause respiratory tract irritation.  |
| <b>Skin</b>       | May be harmful if absorbed through skin. May cause skin irritation. |
| <b>Ingestion</b>  | May be harmful if swallowed.  |

**NFPA Ratings**

|                 |               |
|-----------------|---------------|
| Health          | 1             |
| Flammability    | 0             |
| Reactivity      | 0             |
| Specific hazard | Not Available |

**HMIS Ratings**

|            |   |
|------------|---|
| Health     | 1 |
| Fire       | 0 |
| Reactivity | 0 |

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Component                    | Weight % | CAS #     | EINECS# / ELINCS# | Formula           | Molecular Weight |
|------------------------------|----------|-----------|-------------------|-------------------|------------------|
| Magnesium sulfate, anhydrous | >99      | 7487-88-9 | 231-298-2         | MgSO <sub>4</sub> | 120.37 g/mol     |

**4. FIRST-AID MEASURES**

|                   |   |
|-------------------|---|
| <b>Eyes</b>       | Rinse with plenty of water for at least 15 minutes and seek medical attention if necessary.   |
| <b>Inhalation</b> | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary. |
| <b>Skin</b>       | Wash off with soap and plenty of water. Get medical attention if necessary.   |
| <b>Ingestion</b>  | <b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.      |

**5. FIREFIGHTING MEASURES**

|  |   |
|--|---|
| <b>Suitable (and unsuitable) extinguishing media</b>                 | Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water.   |
| <b>Special protective equipment and precautions for firefighters</b> | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. Prevent contact with skin and eyes. |
| <b>Specific hazards arising from the chemical</b>                    | Emits toxic fumes (sulfur oxides, magnesium oxides) under fire conditions. (See also Stability and Reactivity section)                                  |

**6. ACCIDENTAL RELEASE MEASURES**

|  |   |
|--|---|
| <b>Personal precautions, protective equipment and emergency procedures</b> | See section 8 for recommendations on the use of personal protective equipment.  |
| <b>Environmental precautions</b>   | Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements.   |
| <b>Methods and materials for containment and cleaning up</b>               | Pick up and arrange disposal without creating dust. Sweep up and keep in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste or cleanup materials in accordance with local regulations. |

**7. HANDLING AND STORAGE****Precautions for safe handling**

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Do not ingest or breathe dust. Protect exposed tissue. Keep container closed when not in use.

**Conditions for safe storage, including any incompatibilities**

Store in cool, dry well ventilated area in tightly-closed, plainly-labeled containers. Protect against moisture and light. Maintain adequate ventilation. Keep away from incompatible materials (see section 10 for incompatibilities).

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Occupational Exposure Controls:** Contains no substances with occupational exposure limit values.

**Personal Protection**

|                   |   |
|-------------------|---|
| <b>Eyes</b>       | Wear chemical safety goggles or glasses.  |
| <b>Inhalation</b> | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.   |
| <b>Skin</b>       | Wear appropriate chemical-resistant gloves, lab coat or apron, boots, dust-mask, and other protective clothing appropriate to the risk of exposure. |
| <b>Other</b>      | Not Available   |

**Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

|   |                           |
|---|---------------------------|
| Appearance (physical state, color, etc.)    | White, crystalline solid. |
| Odor  | Odorless                  |
| Odor threshold                              | Not Available             |
| pH  | Not Available             |
| Melting point/freezing point                | Not Available             |
| Initial boiling point and boiling range     | Not Available             |
| Flash point                                 | Not Flammable             |
| Evaporation rate                            | Not Available             |
| Flammability (solid, gas)                   | Not Flammable             |
| Upper/lower flammability or explosive limit | Not Explosive             |
| Vapor pressure                              | Not Applicable            |
| Vapor density                               | Not Applicable            |
| Relative density                            | Not Applicable            |
| Solubility (ies)                            | Soluble                   |
| Partition coefficient: n-octanol/water      | Not Available             |
| Auto-ignition temperature                   | Not Available             |
| Decomposition temperature                   | Not Available             |

**10. STABILITY AND REACTIVITY**

|   |                                  |
|---|----------------------------------|
| <b>Chemical Stability</b>                 | Stable                           |
| <b>Possibility of Hazardous Reactions</b> | Will not occur.                  |
| <b>Conditions to Avoid</b>                | Incompatibles                    |
| <b>Incompatible Materials</b>             | Oxidizers                        |
| <b>Hazardous Decomposition Products</b>   | Sulfur oxides, Magnesium oxides. |

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

|                    |  |
|--------------------|--|
| <b>Skin</b>        | Not Available                              |
| <b>Eyes</b>        | Not Available                              |
| <b>Respiratory</b> | Not Available                              |
| <b>Ingestion</b>   | Not Available                              |
| <b>Other</b>       | LD50 Intraperitoneal – mouse - 1,029 mg/kg |

### Carcinogenicity

|              |  |
|--------------|--|
| <b>IARC</b>  | No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| <b>ACGIH</b> | No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.            |
| <b>NTP</b>   | No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.                 |
| <b>OSHA</b>  | No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.             |

### Signs & Symptoms of Exposure

|                    |  |
|--------------------|--|
| <b>Skin</b>        | May cause skin irritation.   |
| <b>Eyes</b>        | May cause eye irritation.  |
| <b>Respiratory</b> | May cause mucous membranes and upper respiratory tract irritation.                         |
| <b>Ingestion</b>   | May be harmful if swallowed. Gastrointestinal discomfort and possible pain upon ingestion. |

|                                       |               |
|---------------------------------------|---------------|
| <b>Chronic Toxicity</b>               | Not Available |
| <b>Teratogenicity</b>                 | Not Available |
| <b>Mutagenicity</b>                   | Not Available |
| <b>Embryotoxicity</b>                 | Not Available |
| <b>Target Organ(s)</b>                | Not Available |
| <b>Reproductive Toxicity</b>          | Not Available |
| <b>Respiratory/Skin Sensitization</b> | Not Available |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

|                             |  |
|-----------------------------|--|
| <b>Aquatic Vertebrate</b>   | LC50- Pimephales promelas (fathead minnow)- 2,820 mg/l- 96 h |
| <b>Aquatic Invertebrate</b> | EC50- Daphnia magna (Water flea)- 343.56 mg/l -48h           |
| <b>Terrestrial</b>          | Not Available  |

|                                      |               |
|--------------------------------------|---------------|
| <b>Persistence and Degradability</b> | Not Available |
| <b>Bioaccumulative Potential</b>     | Not Available |
| <b>Mobility in Soil</b>              | Not Available |
| <b>PBT and vPvB Assessment</b>       | Not Available |
| <b>Other Adverse Effects</b>         | Not Available |

## 13. DISPOSAL CONSIDERATIONS

|                       |   |
|-----------------------|---|
| <b>Waste Residues</b> | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container or residue. |
|-----------------------|---|

|                           |  |
|---------------------------|--|
| <b>Product Containers</b> | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container. |
|---------------------------|--|

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

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## 14. TRANSPORTATION INFORMATION

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|                  |                     |
|------------------|---------------------|
| US DOT           | Not Dangerous Goods |
| TDG              | Not Dangerous Goods |
| IMDG             | Not Dangerous Goods |
| Marine Pollutant | No                  |
| IATA/ICAO        | Not Dangerous Goods |

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## 15. REGULATORY INFORMATION

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|   |  |
|---|--|
| TSCA Inventory Status   | All ingredients are listed on the TSCA Active inventory. |
| DSL / NDSL  | All ingredients are listed on the DSL inventory.         |
| California Proposition 65                                       | Not Listed   |
| Rhode Island: Hazardous Substance List                          | Not Listed   |
| Massachusetts: Toxic or Hazardous Substance List, Right to Know | Not Listed   |
| Pennsylvania: Hazardous Substance List                          | Not Listed   |
| New Jersey: Right to Know Hazardous Substance List              | Not Listed   |
| SARA 302  | Not Listed   |
| SARA 304  | Not Listed   |
| SARA 311  | No SARA Hazards  |
| SARA 312  | No SARA Hazards  |
| SARA 313  | Not Listed   |
| WHMIS Canada  | Not Listed   |

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## 16. OTHER INFORMATION

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| Revision   | Date       |
|------------|------------|
| Original   | 07/08/2011 |
| Revision 1 | 10/23/2013 |
| Revision 2 | 08/26/2015 |
| Revision 3 | 10/15/2021 |

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