1. Identification

Product Identifier: Magnesium Sulphate (Heptahydrate)

Other means of identification: Epsom salts, Magnesium sulfate, heptahydrate, Sulfuric acid magnesium salt heptahydrate.

Recommended use of the chemical and restrictions on use: Used in food preparation. Also used in the agricultural industry. No information for uses advised against.

Details of manufacturer or importer:

Supplier: RealChem Australia
ABN No: 72 612 326 431
Street Address: 41 Mogul Court, Deer Park, VIC 3023, Australia
Telephone: 03 8390 5776
Web Address: www.realchem.com.au

Emergency telephone number: 000 (Available 24 hours)

2. Hazards Identification

Classification of the substance or mixture: Not classified as hazardous according to the criteria of Regulation (EC) No. 1272/2008 (CLP) the Globally Harmonised System of Classification, Labelling and Packaging and Safe Work Australia.

Poison Schedule: Not a scheduled Poison.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Concentration of Ingredients (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium sulfate, heptahydrate</td>
<td>10034-99-8</td>
<td>600-073-4</td>
<td>&gt;98</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Description of necessary first aid measures: For advice, contact a Poisons Information Centre (eg. Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor at once.

Ingestion: If swallowed, rinse mouth with water. Give a glass of water. If vomiting occurs, give further water. Contact a Poisons information Centre or doctor for advice.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical advice.

Inhalation: If inhaled, remove from contaminated area into fresh air. Remove contaminated clothing. Allow patient to assume a comfortable position. Keep warm and at rest until fully recovered. If symptoms develop seek medical advice.
5. Fire Fighting Measures

**Hazchem Code:** Not applicable

**Suitable extinguishing equipment:** If material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

**Specific hazards arising from the chemical:** Non-combustible solid. Absorbs water from air. Reacts with oxidising agents.¹

**Special protective equipment and precautions for fire fighters:** On decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Clear area of all unprotected personnel. Stop the source of the leak, if safe to do so. Clean up immediately. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wear protective equipment to prevent skin and eye contact and the inhalation of dust.

**Environmental precautions:** If contamination of crops, sewers or waterways has occurred advise local emergency services.

**Methods and materials for containment and clean up:**

- **Large spills**
  
  Sweep, or vacuum up material, avoiding dust generation or dampen spilled material with water to suppress airborne dust. Collect spilled product and place in sealable containers or drums for disposal. Clean contaminated area and objects with plenty of water and detergent. Contain and absorb wash water for disposal.

- **Small spills**
  
  Sweep, or vacuum up material, avoiding dust generation or dampen spilled material with water to suppress airborne dust. Collect spilled product and place in a sealable container for disposal. Clean contaminated area and objects with plenty of water and detergent.

7. Handling and Storage

**Precautions for safe handling:** Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use only in well ventilated areas. Wear protective clothing when mixing or using. Wash hands thoroughly after use.

**Conditions for safe storage, including any incompatibilities:** Store in a dry, clean, cool, well ventilated place away from sunlight. Store in the original, labelled container and keep container tightly closed when not in use. Store container upright and away from oxidising agents and foodstuffs. Check regularly for spillage.
8. Exposure Controls/Personal Protection

Control parameters

**Exposure standards:** No workplace exposure standard has been assigned for this specific material by Safe Work Australia. However for non-specific dusts:

**DUST, INHALABLE – TWA = 10 mg/m\(^3\)**

8-hour Time-weighted average (TWA) means the maximum average airborne concentration of a substance when calculated over an eight-hour working day, for a five-day working week.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standards. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Exposure standards represent airborne concentrations of individual substances which, according to current knowledge, should neither impair the health of, nor cause undue discomfort to, nearly all workers. Exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contaminants should be kept to as low a level that is practical. These exposure standards should not be used to define a line between a safe and dangerous concentration of a chemical. They are not a measure of relative toxicity.

**Biological monitoring:** No biological monitoring required.

**Appropriate engineering controls:** Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

**Personal protective equipment:**

**Manufacturing, Packaging and Transport:** Personal protective equipment should be used only when other control measures (eg. elimination, substitution, isolation and engineering controls) have been found to be impracticable or in conjunction with one or more control measures. When needed wear overalls, safety glasses/chemical goggles, impervious gloves and a dust mask meeting the requirements of AS/NZS 1715 AS/NZS 1716 (Australian/New Zealand Standard™ respiratory protective devices). Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment.

**Recommendations for consumer use:** Wear safety glasses and gloves. Avoid inhaling dust. Wash hands after use.
### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/odour</td>
<td>Practically odourless, white crystalline powder.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>5 - 8 (5% Aqueous solution)</td>
</tr>
<tr>
<td>Specific gravity/density</td>
<td>1.68</td>
</tr>
<tr>
<td>Melting point</td>
<td>1124(^{\circ}) C</td>
</tr>
<tr>
<td>Initial boiling point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability limits</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt;0.1 mmHg</td>
</tr>
<tr>
<td>Rel. vap. Density, air=1</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition co-efficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temp</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition Temp</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Reference:

1.  

### 10. Stability and Reactivity

**Reactivity/Incompatible materials:** Absorbs water from air. Reacts with oxidising agents.  

**Chemical stability:** Stable under normal conditions of use.  

**Conditions to avoid:** Avoid contact with foodstuffs. Keep containers tightly closed when not in use. Avoid extremes of temperature and direct sunlight. Avoid contact with incompatible materials.  

**Possibility of hazardous reactions:** No hazardous reactions when stored and handled within normal conditions of use.  

**Hazardous decomposition products:** Oxides of carbon and nitrogen, smoke and other toxic fumes.

### 11. Toxicological Information

No adverse effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Acute Toxicity**

**Ingestion:** No adverse effects expected however large amounts may cause nausea and vomiting.  

**Skin contact:** Product is not expected to be absorbed through the skin.  

**Inhalation:** Inhalation of dust may result in respiratory irritation.  

**Corrosion/Irritation**

**Skin Contact:** Contact with skin may result in irritation.  

**Eye contact:** Contact with eyes may result in irritation.
Respiratory and skin sensitisation

This product is not expected to cause respiratory nor skin sensitisation.

Other toxic effects

This product is not expected to be a germ cell mutagen and cause heritable genetic damage.

This product is not expected to be carcinogenic and cause cancer.

This product is not expected to be a reproductive toxicant and impair fertility nor cause irreversible effects in the offspring.

The product is not expected to cause specific target organ toxicity, following a single or repeated exposure.

This product is not expected to present an aspiration hazard.

12. Ecological Information

Ecotoxicity: Avoid contaminating waterways.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility in soil: No information available.

Other adverse effects: Not dangerous to the ozone layer.

13. Disposal Considerations

Disposal methods: Do not empty into drains. Refer to State Land Waste Management Authority.

14. Transport Information

Road and Rail Transport

Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail.

Environmental hazards for transport purposes: Not a marine pollutant according to the criteria or the International Maritime Dangerous Goods Code (IMDG) for transport by sea.

Special precautions for transport: Not allocated.

Additional information: Not applicable.

Marine Transport

Not classified as Dangerous Goods according to the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
Air Transport

Not classified as Dangerous Goods according to the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. Regulatory Information

Safety, health and environmental regulations:

None of the components of this product are listed in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

The product's CAS number is listed on the Australian Inventory of Chemical Substances (AICS).

This material is not listed as subject to the following international agreements:

- An ozone depleting substance according to the Montreal Protocol.
- A persistent organic pollutant according to the Stockholm Convention.
- As requiring Prior Informed Consent according to the Rotterdam Convention.
- As Dangerous Goods (Hazardous Waste) according to the Basel Convention on Hazardous Waste.
- A marine pollutant, according to the Prevention of Pollution from Ships (MARPOL).

16. Other Information

References


Reason for Issue

Supersedes Revision: Not applicable.
Reason for Issue: First issue.

This Safety Data Sheet was prepared by SDS Writers (www.sdswriters.com).

The information contained in this Safety Data Sheet is intended to give general guidance on how to safely handle the product in the workplace. Since the supplier of this product cannot anticipate or control the conditions under which it may be used, each user must, prior to usage, assess and control the risks arising from the use of this product. If clarification or further information is needed, the user should contact the product supplier, listed on the first page of this document.

The supplier’s responsibility for the product as sold is subject to the terms and conditions of sale, a copy of which is available on request.

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End of SDS.