

**EPICENTRE TECHNOLOGIES**  
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## MATERIAL SAFETY DATA SHEET

Prepared 3/26/03

### Section I: Product Information

**Product:** 1 M Magnesium chloride a component of EasyLyse™ Bacterial Protein Extraction Solution RP03750 and ReadyPreps™ Protein Preparation Kit RP78100.

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### Section II: Composition/Information on Ingredients

<u>Component</u>	<u>CAS No</u>	<u>Sara 313</u>
Magnesium Chloride hexahydrate	7791-18-6	No

**Chemical Formula:** MgCl<sub>2</sub>•6H<sub>2</sub>O

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### Section III: Hazards Identification

**Emergency Overview.** Caution: avoid contact and inhalation. Target organ(s): central nervous system. Kidneys.

HMIS Rating Health 1\* Flammability: 0 Reactivity: 1

NFPA Rating Health 1 Flammability: 0 Reactivity: 1

\*For additional information on toxicity refer to section 11. Additional chronic hazards present.

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### Section IV: First Aid Measures

**Oral exposure:** If swallowed, wash mouth with water provided person is conscious. Call a physician.

**Inhalation exposure:** If inhaled, remove to fresh air. If breathing is difficult, call a physician.

**Dermal exposure:** In case of contact, wash skin with soap and copious amounts of water.

**Eye exposure:** In case of eye contact, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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### Section V: Fire Fighting Measures

**Autoignitions point:** N/A

**Extinguishing Media:** water spray, carbon dioxide, dry chemical, an appropriate foam

**Fire Fighting Protective Equipment:** Wear full protective equipment, including a self-contained breathing apparatus to prevent contact with eyes and skin.

**Specific hazards:** Emits toxic fumes under fire conditions.

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### Section VI: Accidental Release Measures

**Personal Precautions:** Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Clean up method:** Wash to drain. Ventilate area and wash spill site after material removal is complete.

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## Section VII: Handling and Storage

**Handling:** User exposure: Avoid inhalation. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

**Storage:** Suitable: Keep tightly closed. Store in a cool dry place.

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## Section VIII: Exposure Controls/PPE

**Engineering Controls:** Use in a chemical fume hood. Safety shower and eye bath

**Hand protection:** Chemically resistant gloves.

**Eye protection:** Chemical safety goggles

**Respiratory Protection:** government approved respirator.

**General Hygiene Measures:** Avoid contact with eyes skin and clothing. Wash thoroughly after handling.

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## Section IX: Physical/Chemical Properties

Dissolved solid (liquid)

**Molecular Weight:** 203.31

**pH:** N/A

**Boiling Point:** N/A

**Explosion Limits:** N/A

**Vapor Pressure (mm Hg):** N/A

**Vapor Density (air = 1):** N/A

**Solubility in water:** Miscible

**Appearance and odor:** Clear, colorless liquid.

**Specific Gravity:** 1.57 g/cm<sup>3</sup>

**Melting Pt.:** N/A

**Evaporation Rate:** N/A.

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## Section X: Stability and Reactivity

**Stability:** stable under normal conditions

**Materials to avoid:** Strong oxidants

**Hazardous thermal decomposition products:** Hydrogen chloride gas, magnesium oxide.

**Hazardous polymerization:** Will not occur.

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## Section XI: Toxicological Information

Route of exposure: May cause skin irritation

Skin absorption: May be harmful if absorbed through skin.

Eye Contact: May cause eye irritation

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

Target organs: Central nervous system, kidneys, GI system.

Signs and symptoms of exposure: Can cause central nervous system depression. Exposure can cause:

Stomach pains, vomiting, diarrhea. Not all toxicological properties are known.

RTECS #: OM2975000

Toxicity data:

Oral: - rat 8100 mg/kg (LD50)

Oral: mouse: 7,600 mg/kg (LD50)

Remarks: Behavioral: somnolence (general depressed activity)

Behavioral: Excitement.

Intraperitoneal: mouse 775 mg/kg (LD50)

Remarks: Behavioral: somnolence (general depressed activity)

Behavioral: Excitement.

**Chronic Exposure: Mutagen**

<i>Species</i>	<i>Dose</i>	<i>Cell type</i>	<i>Mutation test</i>
Hampster	12 g/L	lung	cytogenetic analysis
Hampster	12 g/L	lung	cytogenetic analysis

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**Section XII: Ecological Information**

No data available.

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**Section XIII: Disposal Considerations**

Use appropriate method for disposal according to federal, state, and local environmental regulations. This material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

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**Section XIV: Transport Information**

DOT

Proper Shipping Name: none

This substance is considered non-hazardous for transport

IATA

Non-hazardous for air transport.

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**Section XV: Regulatory Information**

US Classification and Label Text:

US Statements: Caution: avoid contact and inhalation. Target organ(s): central nervous system and kidneys.

United States Regulatory Information

SARA listed: No

Canada Regulatory Information:

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR: DSL: No NDSL: No

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**Section XVI: Other Information**

For R&D use only. Not for drug, household or other uses.

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