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## SECTION 1: *Identification of the Substance/Mixture and of the Company/Undertaking*

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### 1.1 Product identifier :

Substance name : MgCL<sub>2</sub>, 50 mM, Molecular Biology Grade

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended restrictions on use : For professional users only.

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

Manufacturer / Supplier : ROJETechnologies

Street address / P.O. Box : ROJE street, 69<sup>th</sup> alley, Foroudgah blvd, Sanaat square, 8917357485, Yazd, Iran

Country ID / Postcode / Place : Iran

Telephone number : +98 35 3723 7122

TeleFax : +98 35 3723 7122

E-Mail : [safety@rojetechnologies.co](mailto:safety@rojetechnologies.co)

National contact: ROJETechnologies

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## SECTION 2: *Hazards Identification*

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Caution! May cause eye irritation. Hygroscopic (absorbs moisture from air)

**Appearance** Colorless

**Physical state** Liquid

**Odor** Mild

### 2.1 Principle Routes of Exposure

#### Acute toxicity

##### Inhalation

May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

##### Eyes

Redness. May cause slight irritation.

##### Skin

Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or

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## Ingestion

cracking.

May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

## Chronic Effects

### Chronic toxicity

No information available

### Symptoms

No information available.

### Aggravated Medical Conditions

None known.

### Interactions with Other Chemicals

No information available

## Environmental hazard

See Section 12: ECOLOGICAL INFORMATION

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## SECTION 3: *Composition/Information on Ingredients*

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Chemical Name	Weight-%
Magnesium chloride	100

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

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## SECTION 4: *First Aid Measures*

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### General advice

Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

### Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

### Skin contact

Wash skin with soap and water.

### Inhalation

Remove to fresh air.

### Ingestion

Clean mouth with water and drink afterwards plenty of water.

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## SECTION 5: *Fire-Fighting Measures*

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### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### **Unsuitable extinguishing media**

CAUTION: Use of water spray when fighting fire may be inefficient.

### **Specific hazards arising from the chemical**

No information available

### **Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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## SECTION 6: *Accidental Release Measures*

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### **Personal precautions**

Ensure adequate ventilation, especially in confined areas.

### **Personal protective equipment [PPE]**

Use personal protection recommended in Section 8.

### **Environmental precautions**

See Section 12 for additional Ecological Information.

### **Methods for containment**

Prevent further leakage or spillage if safe to do so.

### **Methods for cleaning up**

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

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## SECTION 7: *Handling and Storage*

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### Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

### Storage temperature

Refer to company site for specific information.

### Storage Conditions

Keep/store only in original container.

### Incompatible materials

None known based on information supplied.

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## SECTION 8: *Exposure Controls/Personal Protection*

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### Engineering controls

Showers. Eyewash stations.

### Personal protective equipment (PPE)

#### Eye/face protection

Wear safety glasses with side shields (or goggles).

#### Skin and body protection

Wear suitable protective clothing and gloves.

#### Respiratory protection

Use in well ventilated areas.

#### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice

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## SECTION 9: *Physical and Chemical Properties*

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### Information on basic physical and chemical properties

Physical state	Solid
Appearance	White to gray white
Odor	Odorless

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pH: 7.0 (aqueous solution)

**Property**

**Remarks • Method**

Melting point / freezing point	No information available
Boiling point / boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	No information available
Upper flammability limit	
Lower flammability limit	
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

**Other information**

Softening point	No information available
Molecular weight	No information available
VOC content (%)	No information available
Density	No information available
Bulk density	No information available

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**SECTION 10: Stability and Reactivity**

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**Reactivity**

**Stability**

Stable under normal conditions.

**Possibility of hazardous reactions**

Can react briskly with oxidizers - danger of explosion.

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**Conditions to avoid**

Incompatible materials, Ignition sources, Heat.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous decomposition products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

**SECTION 11: Toxicological Information**

**Acute toxicity**

**Product information**

Product does not present an acute toxicity hazard based on known or supplied information.

**Inhalation**

Avoid breathing vapors or mists. May cause irritation of respiratory tract.

**Eye contact**

Redness. May cause slight irritation.

**Skin contact**

Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.

**Ingestion**

May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Magnesium chloride	8100 mg/Kg ( Rat )	-	-

**Chronic toxicity**

<b>Skin corrosion/irritation</b>	Mild
<b>Serious eye damage/eye irritation</b>	Mild
<b>Irritation</b>	Mild
<b>Corrosivity</b>	Mild

**Sensitization**

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<b>Skin</b>	No information available
<b>Respiratory</b>	No information available
<b>Germ cell mutagenicity</b>	No information available
<b>Carcinogenicity</b>	No information available
<b>Reproductive toxicity</b>	No information available
<b>Developmental toxicity</b>	No information available
<b>Teratogenicity</b>	No information available
<b>STOT - single exposure</b>	No information available
<b>STOT - repeated exposure</b>	No information available
<b>Chronic toxicity</b>	No information available
<b>Subchronic toxicity</b>	No information available
<b>Target organ effects</b>	Kidneys, Respiratory system, Eyes, Skin.
<b>Neurological effects</b>	No information available
<b>Other adverse effects</b>	No information available
<b>Aspiration hazard</b>	No information available

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## SECTION 12: Ecological Information

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<b>Marine pollutant</b>	No information available
<b>Ecotoxicity</b>	No information available
<b>Persistence and degradability</b>	No information available
<b>Bioaccumulation</b>	No information available
<b>Mobility</b>	No information available
<b>Other adverse effects</b>	No information available
<b>Ozone depletion potential (ODP)</b>	No information available

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## SECTION 13: Disposal Considerations

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### Relevant Information

Keep out of drains, sewers, ditches and waterways.

### Disposal considerations

Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

### Contaminated packaging

Empty containers must be tripled rinsed prior to disposal.

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## SECTION 14: Transport Information

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DOT	Not regulated
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
RID	Not regulated
ADR	Not regulated
ADN	Not regulated

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## SECTION 15: Regulatory Information

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### US Federal

**TSCA:** Magnesium chloride is not listed on the TSCA inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40 CFR 720.3(u)(2)). Magnesium chloride is listed on the TSCA inventory. Does not have a Significant New Use Rule.

**SARA Reportable Quantities (RQ):** Magnesium chloride does not have a RQ.

**CERCLA/SARA Section 313:** Not reportable under Section 313.

**OSHA - Highly Hazardous:** Not considered highly hazardous by OSHA.

### US State

**State Right to Know:** Magnesium chloride is not listed on the following state right to know lists: California, Florida, New Jersey, Pennsylvania, Minnesota, and Massachusetts.

**California Regulations:** Not listed.

### European/International Regulations

**Canadian DSL/NDSL:**

Magnesium chloride is listed on Canada's DSL List.

**Canada Ingredient Disclosure List:**

Magnesium chloride is not listed on the Ingredient Disclosure List.



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## SECTION 16: Other Information

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(i) Indication of changes: No information available

(ii) Abbreviations and acronyms: No information available

(iii) Key literature references and sources for data: No information available

(iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: No information available

(v) Relevant H-statements (number and full text): No information available

(vi) Training advice: No information available

(vii) Further information:

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.