

## Safety Data Sheet

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### 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier:**

Product name: 0.01mol/L Magnesium chloride solution

Product code (SDS NO): 95164jis\_E-1

**Details of the supplier of the safety data sheet**

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

Address: 1-6, Ohmano-cho, Koshigaya-shi, Saitama 343-0844, Japan

Division: Quality Assurance Department

Telephone number: +81-48-986-6161

FAX: +81-48-989-2787

e-mail address: shiyaku-t@junsei.co.jp

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### 2. Hazards identification

**GHS classification and label elements of the product****Classification of the substance or mixture**

(Note) GHS classification without description: Not classified/Classification not possible

**Label elements**

No GHS label element

No Signal word

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### 3. Composition/information on ingredients

**Mixture/Substance selection:****Substance**

Ingredient name: Magnesium chloride

Content (%): 0.1(w/v)

Chemical formula:  $\text{Cl}_2\text{Mg}$ 

Chemicals No, Japan: 1-233

CAS No.: 7786-30-3

MW: 95.21

ECNO: 232-094-6

Ingredient name: Water

Content (%): Residual quantity of the ingredient mentioned above.

Chemical formula:  $\text{H}_2\text{O}$ 

CAS No.: 7732-18-5

MW: 18.02

ECNO: 231-791-2

Note : The figures shown above are not the specifications of the product.

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### 4. First-aid measures

**Descriptions of first-aid measures****IF INHALED**

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

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**IF ON SKIN (or hair)**

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

**IF IN EYES**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

**IF SWALLOWED**

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

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**5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing media**

Use appropriate extinguishing media suitable for surrounding facilities.

The product is non-flammable.

**Specific hazards arising from the substance or mixture**

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

**Advice for firefighters**

**Specific fire-fighting measures**

Evacuate non-essential personnel to safe area.

**Special protective equipment and precautions for fire-fighters**

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

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**6. Accidental release measures**

**Personnel precautions, protective equipment and emergency procedures**

Ventilate area until material pick up is complete.

Wear proper protective equipment.

**Environmental precautions**

Avoid release to headsprings, rivers, lakes, ocean and groundwater.

**Methods and materials for containment and cleaning up**

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

**Preventive measures for secondary accident**

Collect spillage.

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**7. Handling and storage**

**Precautions for safe handling**

**Preventive measures**

(Exposure Control for handling personnel)

Avoid breathing dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

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#### Safety Measures

- Wear protective gloves, protective clothing or face protection.
- Use personal protective equipment as required.
- When using do not eat, drink or smoke.

Any incompatibilities data is not available.

#### Storage

##### Conditions for safe storage

- Store in a well-ventilated place. Keep container tightly closed.
- Keep cool. Protect from sunlight.

Container and packaging materials for safe handling data is not available.

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### 8. Exposure controls/personal protection

#### Control parameters

Control value in MHLW is not available.

#### Adopted value

- Adopted value in JSOH is not available.
- Adopted value in ACGIH is not available.

OSHA-PEL value is not available.

NIOSH-REL value is not available.

#### Exposure controls

##### Appropriate engineering controls

- Do not use in areas without adequate ventilation.
- Eye wash station should be available.
- Washing facilities should be available.

##### Individual protection measures

#### Respiratory protection

Wear respiratory protection.

#### Hand protection

- Wear protective gloves. Recommended material(s): neoprene, nitrile, butyl rubber, viton, PVC, impermeable or chemical resistant rubber
- Consult with your glove and/or personnel equipment manufacturer for selection of appropriate compatible materials.

#### Eye protection

- Wear safety glasses with side-shields.
- Wear eye/face protection.

#### Skin and body protection

Wear impervious clothing and boots in case of repeated or prolonged treatment.

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### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor: None

Odor threshold data is not available.

pH data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Evaporation rate data is not available.

Melting point/Freezing point data is not available.

Decomposition temperature data is not available.

Self-Accelerating Decomposition Temperature/SADT data is not available.

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Flammability (gases, liquids and solids): Non-ignitable  
Flash point data is not available.  
Auto-ignition temperature data is not available.  
Critical temperature data is not available.  
Lower and upper explosion limit/flammability limit data is not available.  
Vapor pressure data is not available.  
Vapor density data is not available.  
VOC data is not available.  
Relative vapor density (Air=1) data is not available.  
Density and/or relative density data is not available.  
Dynamic viscosity data is not available.  
Kinematic viscosity data is not available.  
Solubility:  
    Solubility in water: Miscible  
    Solubility in solvent data is not available.  
n-Octanol/water partition coefficient data is not available.  
No Particle characteristics data is not available.

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## 10. Stability and Reactivity

### Reactivity

Runaway polymerization will not occur.

### Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions data is not available.

### Conditions to avoid

Heat.

Incompatible materials data is not available.

### Hazardous decomposition products

Magnesium oxides, Chlorides

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## 11. Toxicological Information

### Information on toxicological effects

#### Acute toxicity

Acute toxicity (Oral)

(Magnesium chloride ) rat LD50=2800 mg/kg (HSDB)

#### Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

#### STOT

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

#### Additional data

Data on the preparation itself is not available.

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**12. Ecological Information**

Ecotoxicity data is not available.  
Persistence and degradability data is not available.  
Bioaccumulative potential data is not available.  
Mobility in soil data is not available.  
Ozone depleting chemical data is not available.

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**13. Disposal considerations**

Waste treatment methods  
Dispose of contents/container in accordance with local/national regulation.

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**14. Transport Information**

Not applicable to UN No., UN CLASS  
Environmental hazards  
MARPOL Annex III – Prevention of pollution by harmful substances  
Marine pollutants (yes/no) : no

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**15. Regulatory Information**

Safety, health and environmental regulations/legislation specific for the substance or mixture  
Environmental hazards  
Transport in bulk according to Annex II of MARPOL73/78 and IBC Code  
Noxious Liquid ; Cat. Z  
Magnesium chloride  
Non Noxious Liquid ; Cat. OS  
Water  
US major regulations  
TSCA  
Magnesium chloride; Water  
Other regulatory information  
We are not able to check up the regulatory information with regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.  
Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.  
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.  
Regulatory information in this section are limited to intentional ingredient(s), but does not contain information on non-intentional ingredients or impurities which are not informed by supplier(s).

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**16. Other information**

Reference Book  
Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18)  
IATA Dangerous Goods Regulations (60th Edition) 2019  
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)  
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)  
2019 TLVs and BEIs. (ACGIH)

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<http://monographs.iarc.fr/ENG/Classification/index.php>

Supplier's data/information

Chemicals safety data management system "GHS Assistant" (<https://www.asahi-ghs.com/>)

NITE Chemical Risk Information Platform (NITE-CHRIP)

[https://www.nite.go.jp/en/chem/chrip/chrip\\_search/systemTop](https://www.nite.go.jp/en/chem/chrip/chrip_search/systemTop)

GHS Classification Guidance for Enterprises 2013 Revised Edition (Aug. 2013, METI)

#### General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2018).