

# Material Safety Data Sheet

Magnesium Chloride Solution (RXSOL-19-3385-025)



## 1. Product and Company Identification

Product Name Magnesium Chloride Solution  
Part Number RXSOL-19-3385-025

### Company Details:

RX MARINE INTERNATIONAL  
105, A wing , BSEL , TECH PARK.  
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone +91 22 20871200 - 1400  
Fax +91 22 27612100 ::AOH :0091 9821214367  
Email [mail@rxmarine.com](mailto:mail@rxmarine.com)  
Website [www.rxmarine.com](http://www.rxmarine.com)

## 2. Composition / information on ingredients

| Chemical Name      | CAS       | EC number | Weight  | Formula            |
|--------------------|-----------|-----------|---------|--------------------|
| Magnesium Chloride | 7786-30-3 | 232-094-6 | = 100 % | Cl <sub>2</sub> Mg |

## 3. Hazards Identification

Signal Word None.

Hazard Statements H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.

Precautionary statements P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Classification of the substance or mixture Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Supplemental Hazard Statements None.

Other hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 4. First Aid Measures

General advice None.

If inhaled After inhalation: fresh air.

Eye Contact After eye contact: rinse out with plenty of water. Remove contact lenses.

Swallowed After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Skin Contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

|                                                                            |                                                                                                                                                            |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation                                                                 | Remove patient to fresh air, keep warm and at rest and get medical assistance in necessary.                                                                |
| Ingestion                                                                  | Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately. |
| Most important symptoms and effects, both acute and delaye                 | The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11                                        |
| Indication of any immediate medical attention and special treatment needed | No data available                                                                                                                                          |

## 5. Fire-fighting Measures

|                                                       |                                                                                                                                                                |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flammability                                          | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.                                                                                       |
| Flash Point                                           | Dry powder Dry sand                                                                                                                                            |
| Suitable extinguishing media                          | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                                                        |
| Unsuitable extinguishing media                        | For this substance/mixture no limitations of extinguishing agents are given.                                                                                   |
| Special hazards arising from the substance or mixture | Hydrogen chloride gas Magnesium oxide Not combustible. Ambient fire may liberate hazardous vapours.                                                            |
| Further information                                   | Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. |
| Hazardous combustion products                         | Fire may cause the evolution of Sulphur oxides, nitrogen oxides.                                                                                               |
| Advice for firefighters                               | In the event of fire, wear self-contained breathing apparatus.                                                                                                 |
| Protective Equipment                                  | Use personal protective equipment.                                                                                                                             |
| Specific Hazards Arising from the Chemical            | Oxides of phosphorus Sodium oxides Not combustible. Fire may cause evolution of: Oxides of phosphorus Ambient fire may liberate hazardous vapours.             |

## 6. Accidental Release Measures

|                                                                     |                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures | Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.                                                                                                                                                        |
| Spillage                                                            | Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition sources. Call for assistance on disposal. |
| Enviromental Precaution                                             | Do not let product enter drains.                                                                                                                                                                                                                                                                                                        |
| Methods and materials for containment and cleaning                  | Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.                                                                                                                                  |

## 7. Handling and Storage

|                                                 |                                                                                                                                                                |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Advice on protection against fire and explosion | Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.                                         |
| Incompatible materials                          | Keep away from alkalis, strong oxidizing agents and metals. Provide containment walls of adequate capacity to hold any accidental spills.                      |
| Hygiene measures                                | Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. |
| Precautions for safe handling                   | For precautions see section 2.2.                                                                                                                               |
| Storage conditions                              | Tightly closed. Dry. Store under inert gas. Hygroscopic.                                                                                                       |
| Storage class                                   | Storage class (TRGS 510): 13: Non Combustible Solids                                                                                                           |
| Specific end use(s)                             | Apart from the uses mentioned in section 1.2 no other specific uses are stipulated                                                                             |
| Advice on general occupational hygiene          | Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.                                      |
| Requirements for storage                        | Keep in cool and store under shade.                                                                                                                            |

## 8. Exposure controls and personal protection

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exposure controls                 | Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Control parameters                | Ingredients with workplace control parameters Contains no substances with occupational exposure limit values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Engineering Control               | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Eye/face protection               | Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Body Protection                   | Acid-resistant protective clothing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Skin protection                   | <p>This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: <a href="http://www.kcl.de">www.kcl.de</a>). Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L</p> <p>This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: <a href="http://www.kcl.de">www.kcl.de</a>). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L</p> |
| Respiratory protection            | <p>Required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P1 The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Other Protection Measure          | Handle in accordance with good industrial hygiene and safety practice.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Control of environmental exposure | Do not let product enter drains.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## 9. Physical and chemical properties

|                                              |                           |
|----------------------------------------------|---------------------------|
| Physical state                               | Clear,Liquid              |
| Colour                                       | No data available         |
| Odour                                        | No data available         |
| Odor Threshold                               | No data available         |
| pH                                           | No data available         |
| Melting Point                                | 714 °C                    |
| Boiling Point                                | 1.412 °C                  |
| Flash Point                                  | 72 °C - closed cup        |
| Evaporation Rate                             | Not Applicable            |
| Flammability (solid, gas)                    | No data available         |
| Explosive limits                             | No Data Available         |
| Upper/lower flammability or explosive limits | No data available         |
| Autoignition temperature                     | > 404 °C                  |
| Decomposition temperature                    | No data available         |
| Vapour pressure                              | No data available         |
| Density                                      | 2,32 g/mL at 25 °C        |
| Relative Density                             | No data available         |
| Relative vapor density                       | 3,04 - (Air = 1.0)        |
| Freezing point                               | No data available         |
| Viscosity                                    | No data available         |
| Partition coefficient                        | No data available         |
| Explosive properties                         | No data available         |
| Solubility                                   | 468,7 g/l at 20 °C        |
| Ignition temperature                         | No information available. |
| Particle characteristics                     | No data available         |

## 10. Stability and reactivity

|                                    |                                                                                                                                        |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | No data available                                                                                                                      |
| Stability                          | The product is chemically stable under standard ambient conditions (room temperature) .                                                |
| Possibility of hazardous reactions | Violent reactions possible with: acids                                                                                                 |
| Conditions to avoid                | When mixed with limited amount of water enough heat may be generated to cause frothing. Exposure to moisture. no information available |
| Incompatible materials             | No data available                                                                                                                      |
| Hazardous decomposition products   | In the event of fire: see section 5                                                                                                    |

## 11. Toxicological information

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute toxicity                                   | LD50 Oral - Rat - female - > 5.000 mg/kg (OECD Test Guideline 423) Inhalation: No data available LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Skin corrosion/irritation                        | Skin - In vitro study Result: No skin irritation - 15 min (Human Skin Model Test) Remarks: (for the hexahydrate) The value is given in analogy to the following substances: Magnesium chloride hexahydrateThe value is given in analogy to the following substances: magnesium chloride                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Serious eye damage/eye irritation                | Eyes - Rabbit Result: No eye irritation - 72 h (OECD Test Guideline 405) Remarks: (for the hexahydrate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Respiratory or skin sensitization                | Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Toxic Effects on Human                           | May cause damage to the following organs: upper respiratory tract. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung sensitizer).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Carcinogenicity                                  | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Germ cell mutagenicity                           | Test Type: Human Test system: lymphocyte Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Reproductive toxicity                            | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Specific target organ toxicity - single exposure | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Special Remarks on other Toxi Effects on Humans  | Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Eyes: Causes eye irritation. Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May cause chemical pneumonitis and pulmonary edema, inflammation, edema of bronchi and larynx. Chronic Potential Health Effects: Repeated or prolonged skin exposure may cause allergic reactions in sensitive individuals. Repeated or prolonged exposure by inhalation may affect respiration and metabolism. |
| Endocrine disrupting properties                  | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Repeated dose toxicity - Rat - male and female - Oral - NOAEL (No observed adverse effect level) - > 1.000 mg/kg RTECS: OM2800000 Central nervous system depression, Vomiting, Diarrhea, Abdominal pain, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.                                                                                                             |

## 12. Ecological information

|                                                     |                                                                                                                                                                                                    |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bioaccumulative potential                           | No data available                                                                                                                                                                                  |
| Persistence and degradability                       | The methods for determining the biological degradability are not applicable to inorganic substances.                                                                                               |
| Toxicity to fish                                    | Static test LC50 - Pimephales promelas (fathead minnow) - 2.119,3 mg/l - 96 h (US-EPA)                                                                                                             |
| Toxicity to daphnia and other aquatic invertebrates | Static test LC50 - Daphnia magna (Water flea) - 548,4 mg/l - 48 h Remarks: (ECHA)                                                                                                                  |
| Toxicity to algae                                   | Growth rate EC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)                                                                                             |
| Toxicity to bacteria                                | Static test EC50 - activated sludge - > 900 mg/l - 3 h (OECD Test Guideline 209)                                                                                                                   |
| Mobility in soil                                    | No Information available                                                                                                                                                                           |
| Results of PBT and vPvB assessment                  | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |

|                                 |                                                                                                                                                                                                                                                             |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Endocrine disrupting properties | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| Other adverse effects           | Avoid release to the environment.                                                                                                                                                                                                                           |

### 13. Disposal considerations

|                        |                                                                                                                                                                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Disposal methods       | The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. |
| Contaminated packaging | Dispose of as unused product.                                                                                                                                                                                                                            |
| Waste treatment Method | See <a href="http://www.retrologistik.com">www.retrologistik.com</a> for processes regarding the return of chemicals and containers, or contact us there if you have further questions.                                                                  |

### 14. Transport information

|                            |                   |          |          |
|----------------------------|-------------------|----------|----------|
| UN number                  | ADR/RID:          | IMDG:    | IATA:    |
| UN proper shipping name    | ADR/RID:          | IMDG:    | IATA:    |
| Transport hazard class(es) | ADR/RID:          | IMDG:    | IATA:    |
| Packaging group            | ADR/RID:          | IMDG:    | IATA:    |
| Environmental hazards      | ADR/RID: NO       | IMDG: NO | IATA: NO |
| Further information        | No data available |          |          |

### 15. Regulatory information

|                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inventory status                                                                               | Components are on the following inventories: Polymaleic acid: - US TSCA, Canadian DSL, EU EINECS, Australian AICS, Korean, Philippine PICCS and Chinese Xi irritant R 36/38 Irritant to eyes & skin R 41 Risk of serious damage to eyes S24/25 Avoid contact with skin and eyes S26/28 In case of contact eyes & skin, rinse with plenty water and seek medical advice Section 312/313: Not listed. Not listed under California proposition 65. |
| Safety, health and environmental regulations/legislation specific for the substance or mixture | This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.                                                                                                                                                                                                                                                                                                                                                |
| Other regulations                                                                              | Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.                                                                                                                                                                                                                                 |
| Chemical Safety Assessment                                                                     | For this product a chemical safety assessment was not carried out                                                                                                                                                                                                                                                                                                                                                                               |

### 16. Other information

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other Information | <p>The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.</p> <p><b>DISCLAIMER OF LIABILITY :</b> The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.</p> |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|