# Material Safety Data Sheet

**Magnesium Sulphate** (RXSOL-19-1911-025)

## 1. Product and Company Identifaction

| | |
|---|---|
| Product Name | Magnesium Sulphate |
| Part Number | RXSOL-19-1911-025 |

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 |
| Website | www.rxmraine.com |


## 2. Composition / informationon ingredients

| Chemical Name | CAS | EC number | Weight | Formula |
|---|---|---|---|---|
| Magnesium sulfate | 7487-88-9 | 231-298-2 | = 100 % | $MgSO_4$ |

## 3. Hazards Identification

| | |
|---|---|
| Signal Word | None. |
| Hazard Statements | H272 May intensify fire; oxidizer. H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects. |
| Precautionary statements | P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe dusts or mists. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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 | May be combustible at high temperature. |
| 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 | Sulfur oxides 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 | Has a fire-promoting effect due to the release of oxygen.<br>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. |
| Personal Protection | Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8. |
| 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. |
| Reference to other sections | For disposal see section 13. |

## 7. Handling and Storage

| | |
|---|---|
| Advice on protection against fire and explosion | Keep away from open flames, hot surfaces and sources of ignition. |
| 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. |
| Conditions for safe storage, including any incompatibilities | Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials. |
| Storage conditions | Tightly closed. Dry. 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. |

## 8. Exposure controls and personal protection

| | |
|---|---|
| Exposure controls | No specific additional engineering controls are required. Provide good natural or artificial ventilation. |
| Engineering Control | Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. |
| 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 | Protective clothing. |
| Skin protection | 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: www.kcl.de). Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L 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: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L |
| Respiratory protection | 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 entrepeneur 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. |
| 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 | Granular, powder |
| Colour | White |
| Odour | Odorless |
| Odor Threshold | Not Applicable |
| pH | ca.7,9 at 50 g/l at 25 °C |
| Melting Point | No data available |
| Boiling Point | No data available |
| Flash Point | Not Applicable |
| 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 | No data available |
| Decomposition temperature | 1.124 °C - |
| Vapour pressure | No data available |
| Density | 2,66 g/cm3 at 20 °C |
| Relative Density | No data available |
| Freezing point | No data available |
| Specific Gravity | No data available |
| Partition coefficient | No data available |
| Explosive properties | No data available |
| Solubility | 300 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 | No data available |
| Conditions to avoid | Hygroscopic no information available |
| Incompatible materials | Strong |
| Hazardous Polymerization | In the event of fire: see section 5 |

## 11. Toxicological information

| | |
|---|---|
| Acute toxicity | LD50 Oral - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 425) Inhalation: No data available LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: potassium sulphate |
| Skin corrosion/irritation | Skin - reconstructed human epidermis (RhE) Result: No skin irritation - 5 min (Regulation (EC) No. 440/2008, Annex, B.46) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: potassium sulphate |
| Serious eye damage/eye irritation | Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: potassium sulphate |
| Respiratory or skin sensitization | Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429) |
| Carcinogenicity | No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| Germ cell mutagenicity | No data available Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative |
| Reproductive toxicity | No data available |
| Specific target organ toxicity - single exposure | May cause damage to organs through prolonged or repeated exposure. - Kidney |
| Endocrine disrupting properties | Repeated dose toxicity - Rat - male - Oral - 104 Weeks - NOAEL (No observed adverse effect level) - 256 mg/kg Remarks: (in analogy to similar products) The value is given in analogy to the following substances: ammonium sulphate RTECS: OM4500000 Diarrhea, Vomiting, Central nervous system depression To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Toxic effects are only to be expected at very high doses. However, when the product is handled appropriately, hazardous effects are unlikely to occur. Therapeutically used substance. Handle in accordance with good industrial hygiene and safety practice. |

## 12. Ecological information

| | |
|---|---|
| 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) - 680 mg/l - 96 h (US-EPA) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: potassium sulphate |
| Toxicity to daphnia and other aquatic invertebrates | Static test LC50 - Daphnia magna (Water flea) - 720 mg/l - 48 h (US-EPA) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: potassium sulphate |
| Toxicity to bacteria | EC50 - Photobacterium phosphoreum - 84.000 mg/l - 30 min Remarks: (IUCLID) |
| Toxicity to algae | Static test EC50 - Chlorella vulgaris (Fresh water algae) - 2.700 mg/l - 18 Days Remarks: (in analogy to similar products) |
| Products Biodegradation | The methods for determining the biological degradability are not applicable to inorganic substances. |
| 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 | Discharge into the environment must be avoided. |

## 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 | Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials. |
| Waste treatment Method | See www.retrologistik.com 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 |
| Special precautions for user | Tunnel restriction code : (C/E) | | |
| Further information | Not classified as dangerous in the meaning of transport regulations. | | |

## 15. Regulatory information

| | |
|---|---|
| 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 | 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

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 weassume 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 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.

DISCLAIMER OF LIABILITY :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