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## Material Safety Data Sheet

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifiers

Product name Magnesium chloride  
Product number E010094  
Brand 3ASenrise  
CAS number 7786-30-3

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

Company: Anhui Senrise Technology Co., Ltd.  
Address: No.88 Weisan Road, High-Tech Industrial Development Zone, Anqing, Anhui  
Post code: 246003  
Tel: 400-005-6266  
Fax: 0556-5555368  
Email: service@3asenrise.com

#### 1.3 Emergency telephone

Emergency telephone: 0556-5500208

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

Identified uses: For R&D use only. Not for pharmaceutical, household or other uses.

### 2 HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

#### 2.2 GHS label elements, including precautionary statements

##### Pictogram

**Signal word:** No data available

##### Hazard statement(s)

No data available

##### Precautionary statement(s)

##### Prevention

No data available

##### Response

No data available

##### Storage

No data available

##### Disposal

No data available

#### 2.3 Physical and chemical hazards

No data available

## 2.4 Health hazards

No data available

## 2.5 Environmental hazards Code

No data available

## 2.6 Other hazards

No data available

# 3 COMPOSITION/INFORMATION ON INGREDIENTS

## Substance / Mixture: Substance

### 3.1 Substance

|                  |                    |
|------------------|--------------------|
| Name             | Magnesium chloride |
| Formula          | MgCl <sub>2</sub>  |
| Molecular Weight | 95.21              |
| CAS              | 7786-30-3          |
| Concentration    | AR, ≥99%           |

# 4 FIRST AID MEASURES

## 4.1 Description of first aid measures

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

No data available.

# 5 FIREFIGHTING MEASURES

## 5.1 Extinguishing media

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

## 5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas Magnesium oxide Not combustible. Ambient fire may liberate hazardous vapours.

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# 6 ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

#### **6.4 Reference to other section**

For disposal see section 13.

### **7 HANDLING AND STORAGE**

#### **7.1 Precautions for safe handling**

##### **Advice on safe handling**

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

##### **Advice on protection against fire and explosion**

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

##### **Hygiene measures**

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

#### **7.2 Conditions for safe storage, including any incompatibilities**

##### **Storage conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Long term storage: RT

### **8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **8.1 Control parameters**

No data available.

#### **8.2 Personal protective equipment**

##### **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.

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

##### **Body protection**

Flame retardant antistatic protective clothing.

##### **Respiratory protection**

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

##### **Control of environmental exposure**

Do not let product enter drains. Risk of explosion.

### **9 PHYSICAL AND CHEMICAL PROPERTIES**

#### **9.1 Information on basic physical and chemical properties**

|                                                 |                        |
|-------------------------------------------------|------------------------|
| a) Appearance                                   | White to whitish solid |
| b) Odor                                         | odorless               |
| c) pH                                           | No data available      |
| d) Melting point/freezing point                 | 714 ° C                |
| e) Initial boiling point and boiling range      | 1,412 ° C              |
| f) Upper/lower flammability or explosive limits | No data available      |
| g) Flash point                                  | No data available      |
| h) Evaporation rate                             | No data available      |
| i) Vapor pressure                               | No data available      |

|                                           |                               |
|-------------------------------------------|-------------------------------|
| j) Vapor density                          | No data available             |
| k) Density                                | 2.32 g/mL at 25 ° C           |
| l) Water solubility                       | 468.7 g/l at 20 ° C – soluble |
| m) Partition coefficient: n-octanol/water | No data available             |
| n) Autoignition temperature               | > 404 ° C                     |
| o) Decomposition temperature              | No data available             |
| p) Flammability                           | The product is not flammable. |

## **10 STABILITY AND REACTIVITY**

### **10.1 Chemical stability**

No data available.

### **10.2 Conditions to avoid**

No data available.

### **10.3 Incompatible materials**

No data available

### **10.4 Hazardous decomposition products**

In the event of fire: see section 5.

## **11 TOXICOLOGICAL INFORMATION**

### **11.1 Acute toxicity**

LD50 Oral

– Rat – female – > 5,000 mg/kg

LC50 Inhalation

No data available

LD50 Dermal

– Rat – male and female – > 2,000 mg/kg

### **11.2 Skin corrosion/irritation**

Skin – In vitro study Result: No skin irritation – 15 min

### **11.3 Serious eye damage/eye irritation**

Eyes – Rabbit Result: No eye irritation – 72 h Remarks: (for the hexahydrate)

### **11.4 Respiratory or skin sensitization**

Maximization Test – Guinea pig Result: negative

### **11.5 Germ cell mutagenicity**

Test Type: Human Test system: lymphocyte Metabolic activation: with and without metabolic activation Result: negative

### **11.6 Carcinogenicity**

No data available

### **11.7 Reproductive toxicity**

No data available

### **11.8 Specific target organ toxicity - single exposure**

No data available

### **11.9 Specific target organ toxicity - repeated exposure**

No data available

### **11.10 Aspiration hazard**

no data available.

### **11.11 Additional Information**

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**

### **12.1 Toxicity**

Toxicity to fish:

static test LC50 – Pimephales promelas (fathead minnow) – 2,119.3 mg/l – 96 h

Toxicity to daphnia and other aquatic:

static test LC50 – Daphnia magna (Water flea) – 548.4 mg/l – 48 h

Toxicity to algae:

Growth rate EC50 – Desmodesmus subspicatus (green algae) – > 100 mg/l – 72 h

Toxicity to bacteria:

static test EC50 – activated sludge – > 900 mg/l – 3 h

### **12.2 Persistence and degradability**

The methods for determining the biological degradability are to inorganic substances.

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available

### **12.5 Other adverse effects**

No data available

## **13 DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Observe all federal, state and local regulations when disposing of the substance.

#### **Contaminated packaging**

Disposal must be made according to official regulations.

## **14 TRANSPORT INFORMATION**

### **14.1 UN number**

ADR/RID: – IMDG: – IATA: –

### **14.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

### **14.3 Transport hazard class(es)**

ADR/RID: – IMDG: – IATA: –

### **14.4 Packaging group**

ADR/RID: – IMDG: – IATA: –

### **14.5 Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

### **14.6 Special precautions for user**

No data available

## **15. REGULATORY INFORMATION**

## **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Applicable regulations

Please pay attention to waste disposal and meet the requirements of local regulations.

## **16. OTHER INFORMATION**

### **Abbreviations and acronyms**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

CAS: Chemical Abstracts Service (division of the American Chemical Society)

### **Further information**

The above safety technical information is for reference only, because many physical and chemical properties are not entirely clear. Please consult information carefully before use and use after confirmation.

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