

## Chemical Safety Data Sheet MSDS / SDS

## Magnesium

Revision Date:2024-12-21 Revision Number:1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## Product identifier

Product name : Magnesium  
CBnumber : CB9249642  
CAS : 7439-95-4  
EINECS Number : 231-104-6  
Synonyms : Magnesium,magnesium turnings

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

## Company Identification

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 400-158-6606

## SECTION 2: Hazards identification

## GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Danger

## Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
P222 Do not allow contact with air.  
P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.  
P231+P232 Handle under inert gas. Protect from moisture.  
P235+P410 Keep cool. Protect from sunlight.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P370+P378 In case of fire: Use ... for extinction.  
P402+P404 Store in a dry place. Store in a closed container.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P407 Maintain air gap between stacks/pallets.

P413 Store bulk masses greater than ... kg/...lbs at temperatures not exceeding ... °C/...°F.

P420 Store away from other materials.

P422 Store contents under ...

#### **Hazard statements**

H225 Highly Flammable liquid and vapour

H228 Flammable solid

H250 Catches fire spontaneously if exposed to air

H251 Self-heating; may catch fire

H260 In contact with water releases flammable gases which may ignite spontaneously

H261 In contact with water releases flammable gas

H302 Harmful if swallowed

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H351 Suspected of causing cancer

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## SECTION 3: Composition/information on ingredients

### **Substance**

Product name	: Magnesium
Synonyms	: Magnesium,magnesium turnings
CAS	: 7439-95-4
EC number	: 231-104-6
MF	: Mg
MW	: 24.31

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## SECTION 4: First aid measures

### **Description of first aid measures**

#### **General advice**

Show this material safety data sheet to the doctor in attendance.

#### **If inhaled**

After inhalation: fresh air.

#### **In case of skin contact**

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

#### **In case of eye contact**

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

#### **If swallowed**

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

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

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

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## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media

Special powder against metal fire Cover with dry sand or cement.

#### Unsuitable extinguishing media

Foam Water

### Special hazards arising from the substance or mixture

Magnesium oxide Not combustible.

May not get in touch with: Water

Ambient fire may liberate hazardous vapours.

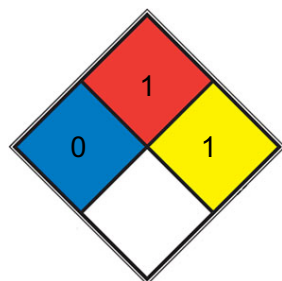
### Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

### Further information

none

### NFPA 704



☒ HEALTH 0 Poses no health hazard, no precautions necessary and would offer no hazard beyond that of ordinary combustible materials

☒ FIRE 1 Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. [mineral oil](#), ammonia)

☒ REACT 1 Normally stable, but can become unstable at elevated temperatures and pressures (e.g. [propene](#))

☐ SPEC.

☐ HAZ.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### **Environmental precautions**

Do not let product enter drains. Risk of explosion.

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

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.

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## **SECTION 7: Handling and storage**

### **Precautions for safe handling**

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

Keep workplace dry. Do not allow product to come into contact with water.

#### **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. Wash hands after working with substance. For precautions see section 2.2.

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

#### **Storage conditions**

Tightly closed. Keep away from heat and sources of ignition.

Never allow product to get in contact with water during storage.

#### **Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## **SECTION 8: Exposure controls/personal protection**

### **control parameter**

#### **Hazard composition and occupational exposure limits**

Does not contain substances with occupational exposure limits.

### **Exposure controls**

## 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

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](http://www.kcl.de)).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested:KCL 741 Dermatrill? 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](http://www.kcl.de)).

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested:KCL 741 Dermatrill? L

### Body Protection

Flame retardant antistatic protective clothing.

### 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 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.

### Control of environmental exposure

Do not let product enter drains. Risk of explosion.

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

Appearance	powder
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	Melting point/range: 648 °C
Initial boiling point and boiling range	1.090 °C
Flash point	-26 °F
Evaporation rate	No data available

Flammability (solid, gas)	May form combustible dust concentrations in air.
Upper/lower flammability or explosive limits	No data available
Vapour pressure	1 hPa at 621 °C
Vapour density	6 (vs air)
Relative density	1.74
Water solubility	H <sub>2</sub> O: 1 M at 20 °C, clear, colorless
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	No data available
Oxidizing properties	No data available
resistivity	4.46 μΩ-cm, 20°C

### Other safety information

No data available

## SECTION 10: Stability and reactivity

### Reactivity

Self-heating; may catch fire.

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### Possibility of hazardous reactions

Risk of dust explosion.

Reacts with the following substances: Acids

Bases

Oxidizing agents

### Conditions to avoid

Exposure to moisture. Exposure to air. Moisture.

### Incompatible materials

No data available

### Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological information

## Information on toxicological effects

### Acute toxicity

Oral

### Skin corrosion/irritation

No data available

### Serious eye damage/eye irritation

No data available

### Respiratory or skin sensitization

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

### Reproductive toxicity

No data available

### Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

No data available

### Aspiration hazard

No data available

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## SECTION 12: Ecological information

### Toxicity

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data 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.

### Other adverse effects

No data available

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## SECTION 13: Disposal considerations

### Waste treatment methods

#### Incompatibilities

Reacts violently with, oxidizers, strong acids; acetylene, ammonium salts; arsenic, beryllium fluoride, carbon tetrachloride, carbonates, chloroform, cyanides, chlorinated hydrocarbons; ethylene oxide; hydrocarbons, metal oxides; methanol, phosphates, silver nitrate; sodium peroxide; sulfates, trichloroethylene.

#### Product

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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## SECTION 14: Transport information

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UN number

ADR/RID:IMDG:IATA:ADR/RID:IMDG:IATA:

UN number

ADR/RID:IMDG:IATA:ADR/RID:IMDG:IATA:

IATA:

#### UN number

ADR/RID: 1993 IMDG: 1993 IATA: 1993

ADR/RID: 1987 IMDG: 1987 IATA: 1987

ADR/RID: 3 IMDG: 3 IATA: 3

ADR/RID: 2789 IMDG: 2789 IATA: 2789

ADR/RID: - IMDG: - IATA: -

ADR/RID: - IMDG: - IATA: -

ADR/RID: 2811 IMDG: 2811 IATA: 2811

ADR/RID: 2811 IMDG: 2811 IATA: 2811

ADR/RID: 3077 IMDG: 3077 IATA: 3077

ADR/RID: - IMDG: - IATA: -

#### UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Genipin) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Genipin) IATA: Toxic solid, organic, n.o.s. (Genipin)

ADR/RID: - IMDG: - IATA: -

ADR/RID: - IMDG: - IATA: -

ADR/RID: ACETIC ACID, GLACIAL IMDG: ACETIC ACID, GLACIAL IATA: Acetic acid, glacial

ADR/RID: II IMDG: II IATA: II

ADR/RID: ALCOHOLS, N.O.S. (Pent-3-yn-1-ol) IMDG: ALCOHOLS, N.O.S. (Pent-3-yn-1-ol) IATA: Alcohols, n.o.s. (Pent-3-yn-1-ol)

ADR/RID: FLAMMABLE LIQUID, N.O.S. (2-Ethylfuran) IMDG: FLAMMABLE LIQUID, N.O.S. (2-Ethylfuran) IATA: Flammable liquid, n.o.s. (2-



Ethylfuran)

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-(4- Chlorophenoxy)benzaldehyde) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-(4- Chlorophenoxy)benzaldehyde) IATA: Environmentally hazardous substance, solid, n.o.s. Chlorophenoxy)benzaldehyde)

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (cupferron) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (cupferron) IATA: Toxic solid, organic, n.o.s. (cupferron)

### Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

ADR/RID: 3 IMDG: 3 IATA: 3

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

ADR/RID: 8 (3) IMDG: 8 (3) IATA: 8 (3)

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

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

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

(2-(4- ADR/RID: 9 IMDG: 9 IATA: 9

ADR/RID: - IMDG: - IATA: -

### Packaging group

ADR/RID: III IMDG: III IATA: III

ADR/RID: - IMDG: - IATA: -

ADR/RID: III IMDG: III IATA: III

ADR/RID: III IMDG: III IATA: III

No data available

No data available

ADR/RID: II IMDG: II IATA: II

No data available

ADR/RID: III IMDG: III IATA: III

ADR/RID: II IMDG: II IATA: II

### Environmental hazards

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

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

ADR/RID: yes IMDG Marine pollutant: yes IATA: yes

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

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

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

### Special precautions for user

No data available

No data available

No data available

Further information EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing  
Chemical Book

inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

No data available

No data available

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## SECTION 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.

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### Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

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### **Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

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## SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H228 Flammable solid.

H251 Self-heating; may catch fire.

H261 In contact with water releases flammable gas.

#### **Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.