

## MATERIAL SAFETY DATA SHEET (MSDS)

#### **MAGNESIUM METAL POWDER**

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

1.1. Product identifier

Trade name : MAGNESIUM METAL POWDER

**Product code** : M0125500100

Identification of the product : Magnesium powder (pyrophoric)

CAS No: 7439-95-4 EC No :231-104-6 Annex No :012-001-00-3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification SUVCHEM
Chaitanya Tower 2n

Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

**Phone no.** : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

#### 2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : F; R15-R17

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Physical hazards : Substances and mixtures, which in contact with water, emit flammable gases -

Category 1 - Danger (CLP : Water-react. 1) H260

Pyrophoric solids - Category 1 - Danger (CLP: Pyr. Sol. 1) H250

2.2. Label elements

Labelling EC 67/548 or EC 1999/45



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### 2. Hazards identification -DSD (continued)

Symbol(s)

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Symbol(s) : F : Highly flammable

R Phrase(s) : R15 : Contact with water liberates highly flammable gases.

R17 : Spontaneously flammable in air.

S Phrase(s) : S2 : Keep out of the reach of children.

S7/8: Keep container tightly closed and dry.

S43: In case of fire, use.

Contains : Magnesium powder (pyrophoric)

### Labelling Regulation EC 1272/2008 (CLP)

**Hazard pictograms** 



Signal words : Danger

**Hazard statements** : H250 : Catches fire spontaneously if exposed to air.

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

spontaneously.

**Precautionary statements** 

• **General** : P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

• **Prevention** : P223: Keep away from any possible contact with water, because of violent reaction

and possible flash fire.

P222: Do not allow contact with air.

P231+P232: Handle under inert gas. Protect from moisture.

P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking. P280: Wear protective gloves, protective clothing, eye protection, face protection.

• Response : P335+P334: Brush off loose particles from skin. Immerse in cool water, wrap in wet

bandages.

P370+P378: In case of fire: Use for extinction.

• **Storage** : P422: Store contents under inert gas. (See information supplied by the

manufacturer)

P402+P404: Store in a dry place. Store in a closed container.

• Disposal considerations : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

Contains : Magnesium powder (pyrophoric)

#### 2.3. Other hazards



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### 2. Hazards identification -DSD (continued)

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

### 3. Composition/information on ingredients

Substance / Preparation : Magnesium powder (pyrophoric)

EC No :231-104-6 Annex No :012-001-00-3

Substance.

Substance name Contents CAS No EC No Annex No REACH Ref. Classification Magnesium powder (pyrophoric): 100 % 7439-95-4 231-104-6 012-001-00-3 ---- F; R15-R17

Pyr. Sol. 1 \_ H250 Water-react. 1 \_ H260

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

#### 4.1. Description of first aid measures

**Inhalation** : Assure fresh air breathing. Allow the victim to rest.

Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and

water, followed by warm water rinse. Immerse in cool water, wrap in wet bandages.

Brush off loose particles from skin.

**Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or

redness persist.

**Ingestion** : Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

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

Symptoms relating to use : Not expected to present a significant hazard under anticipated conditions of normal

use.

Not expected to present a significant hazard under anticipated conditions of normal

use.

#### 4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

#### 5. Fire-fighting measures

### 5.1. Extinguishing media



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### 5. Fire-fighting measures (continued)

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media**: Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

### 5.2. Special hazards arising from the substance or mixture

Flammable class : Flammable solid.

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

#### 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For emergency responders** : Equip cleanup crew with proper protection.

Ventilate area.

**Special precautions**: Catches fire spontaneously if exposed to air.

Do not allow contact with air.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust.

Store away from other materials.

#### 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

### 7. Handling and storage

### 7.1. Precautions for safe handling



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#### **MAGNESIUM METAL POWDER**

### 7. Handling and storage (continued)

**Handling** : Wash hands and other exposed areas with mild soap and water before eat, drink or

smoke and when leaving work.

Handle empty containers with care because residual vapours are flammable. Handle under inert gas. Protect from moisture. Do not allow contact with air. Keep away from any possible contact with water, because of violent reaction and

possible flash fire.

**Technical protective measures** 

: Provide good ventilation in process area to prevent formation of vapour.

**Special precautions** 

: No naked lights. No smoking.

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

Storage : Keep only in the original container in a cool, well ventilated place. Keep container

closed when not in use.

Store contents under inert gas. (See information supplied by the manufacturer) Protect from moisture. Keep away from any possible contact with water, because of

violent reaction and possible flash fire.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Specific end use(s) : None.

### 8. Exposure controls/personal protection

#### 8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

Respiratory protection
 Hand protection
 Wear approved mask.
 Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.Others : When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

#### 9. Physical and chemical properties

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

Physical state at 20 °C : Solid.

Colour : silver white



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### 9. Physical and chemical properties (continued)

Odour : Odorless

Odour threshold : No data available.
pH value : Not applicable.

Melting point [°C] : 648 °C

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : 4730C

Flammability (solid, gas) : Catches fire spontaneously if exposed to air.

: N/A

N/A

Flash point [°C] : N/A : 11000C Boiling point [°C] : N/A Initial boiling point [°C] : N/A Final boiling point [°C] **Evaporation rate** : N/A Vapour pressure [20°C] : N/A : N/A Vapour pressure mm/Hq : N/A Vapour density : 1,74 Density [g/cm3] Relative density, gas (air=1) : N/A : N/A Relative density, liquid (water=1)

Solubility in water [% weight] : Insoluble in water

Solubility in water

Log Pow octanol / water at 20°C : No data available.

Solubility : N/A Viscosity at 40°C [mm2/s] : N/A

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidising properties : No data available.

### 10. Stability and reactivity

10.1. Reactivity

**Reactivity** : Not established.

10.2. Chemical stability



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#### **MAGNESIUM METAL POWDER**

### 10. Stability and reactivity (continued)

**Chemical stability** : Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

**Hazardous reactions** : In contact with water releases flammable gases which may ignite spontaneously.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures. Open flame. Overheating.

Heat. Sparks. Do not allow contact with air.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

**Hazardous decomposition products**: Fumes. Carbon monoxide. Carbon dioxide.

#### 11. Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity** 

 Inhalation : Based on available data, the classification criteria are not met. Dermal : Based on available data, the classification criteria are not met. Ingestion : Based on available data, the classification criteria are not met. Corrosion : Based on available data, the classification criteria are not met. Irritation : Based on available data, the classification criteria are not met. Sensitization : Based on available data, the classification criteria are not met. Mutagenicity : Based on available data, the classification criteria are not met. Carcinogenicity : Based on available data, the classification criteria are not met. **Toxic for reproduction** : Based on available data, the classification criteria are not met. : Based on available data, the classification criteria are not met. STOT-single exposure STOT-repeated exposure : Based on available data, the classification criteria are not met. **Aspiration hazard** : Based on available data, the classification criteria are not met.

### 12. Ecological information

### 12.1. Toxicity



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### 12. Ecological information (continued)

**Toxicity information** : Not established.

12.2. Persistence - degradability

**Persistence - degradability** : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

**Environmental precautions** : Avoid release to the environment.

#### 13. Disposal considerations

#### 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Handle empty containers with care because residual vapours are flammable.

### 14. Transport information

#### 14.1. Land transport (ADR-RID)

Proper shipping name : MAGNESIUM or MAGNESIUM ALLOYS with more than 50% magnesium in pellets,

turnings or ribbons

UN N° : 1869 H.I. nr : 40 ADR - Class : 4.1

**Labelling - Transport** : 4.1 : Flammable solids, self-reactive substances and desensitized explosives.



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### 14. Transport information (continued)



ADR - Classification code : F3
ADR - Group : III

ADR - Packing instructions : P002 R001 LP002

ADR - Limited Quantity : 5 KG

**ADR** - Tunnel code



: E : Passage forbidden through tunnels of category E.

### 14.2. Sea transport (IMDG) [English only]

Proper shipping name : MAGNESIUM or MAGNESIUM ALLOYS with more than 50% magnesium in pellets,

turnings or ribbons

UN N° : 1869

**IMO-IMDG - Class or division** : 4.1 : Flammable solids, self-reactive substances and desensitized explosives.

IMO-IMDG - Packing group : III

IMO- IMDG - Packing instructions : P002 LP02

IMO-IMDG - Limited quantities : 5 kg
IMO-IMDG - Marine pollution : No
EMS-Nr : F-G S-G

### 14.3. Air transport (ICAO-IATA) [English only]

**Proper shipping name**: MAGNESIUM or MAGNESIUM ALLOYS with more than 50% magnesium in pellets,

turnings or ribbons

UN N° : 1869

IATA - Class or division : 4.1 : Flammable solids, self-reactive substances and desensitized explosives.

IATA - Packing group : III

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 446

instruction

- Passenger and Cargo - Maximum : 25 kg

**Quantity/Packing** 

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction : 449

- Cargo only - Maximum Quantity/ : 100 kg

**Packing** 

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### **MAGNESIUM METAL POWDER**

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

### **DISCLAIMER:**

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

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