

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
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## 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 : M0125500500

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, 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

**MATERIAL SAFETY DATA SHEET (MSDS)**
**MAGNESIUM METAL POWDER**
**2. Hazards identification -DSD (continued)**

Symbol(s)



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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## MATERIAL SAFETY DATA SHEET (MSDS)

### MAGNESIUM METAL POWDER

#### 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<br>Pyr. Sol. 1 _ H250<br>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

**MATERIAL SAFETY DATA SHEET (MSDS)**
**MAGNESIUM METAL POWDER**
**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**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**MAGNESIUM METAL POWDER**
**7. Handling and storage (continued)**

|                                      |  |
|--------------------------------------|--|
| <b>Handling</b>                      | : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.<br>Handle empty containers with care because residual vapours are flammable.<br>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. |
| <b>Technical protective measures</b> | : Provide good ventilation in process area to prevent formation of vapour.   |
| <b>Special precautions</b>           | : No naked lights. No smoking.   |

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

|                            |   |
|----------------------------|---|
| <b>Storage</b>             | : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.<br>Store contents under inert gas. (See information supplied by the manufacturer)<br>Protect from moisture. Keep away from any possible contact with water, because of violent reaction and possible flash fire. |
| <b>Storage - away from</b> | : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.   |

**7.3. Specific end use(s)**

|                            |         |
|----------------------------|---------|
| <b>Specific end use(s)</b> | : None. |
|----------------------------|---------|

**8. Exposure controls/personal protection**
**8.1. Exposure controls**

|                                 |   |
|---------------------------------|---|
| <b>Personal protection</b>      | : Avoid all unnecessary exposure.         |
| • <b>Respiratory protection</b> | : Wear approved mask.                     |
| • <b>Hand protection</b>        | : Wear protective gloves.                 |
| • <b>Eye protection</b>         | : Chemical goggles or safety glasses.     |
| • <b>Others</b>                 | : When using, do not eat, drink or smoke. |

**8.2. Control parameters**

|                                     |                      |
|-------------------------------------|----------------------|
| <b>Occupational Exposure Limits</b> | : No data available. |
|-------------------------------------|----------------------|

**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

|                                |                |
|--------------------------------|----------------|
| <b>Physical state at 20 °C</b> | : Solid.       |
| <b>Colour</b>                  | : silver white |

**MATERIAL SAFETY DATA SHEET (MSDS)**
**MAGNESIUM METAL POWDER**
**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.<br>N/A |
| Flash point [°C]                   | : N/A  |
| Boiling point [°C]                 | : 11000C   |
| Initial boiling point [°C]         | : N/A  |
| Final boiling point [°C]           | : N/A  |
| Evaporation rate                   | : N/A  |
| Vapour pressure [20°C]             | : N/A  |
| Vapour pressure mm/Hg              | : N/A  |
| Vapour density                     | : N/A  |
| Density [g/cm3]                    | : 1,74   |
| Relative density, gas (air=1)      | : N/A  |
| Relative density, liquid (water=1) | : N/A  |
| Solubility in water [% weight]     | : Insoluble in water                                   |
| Solubility in water                | : N/A  |
| 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**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**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.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**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.**



**MATERIAL SAFETY DATA SHEET (MSDS)**
**MAGNESIUM METAL POWDER**
**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 instruction : 446  
   - Passenger and Cargo - Maximum Quantity/Packing : 25 kg  
 IATA - Cargo only : ALLOWED  
   - Cargo only - Packing instruction : 449  
   - Cargo only - Maximum Quantity/Packing : 100 kg

**MATERIAL SAFETY DATA SHEET (MSDS)**

**MAGNESIUM METAL POWDER**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 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.

**End of document**