

Material Safety Data Sheet	
MAGNESIUM (METAL) TURNING (For Grignard Reactions)	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
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1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : MAGNESIUM (METAL) TURNING (For Grignard Reactions)

Product code : 15472

Identification of the product : Magnesium powder (pyrophoric)

CAS No : 7439-95-4

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 : MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

Email : info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503.

1.4. Emergency telephone number

Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm).

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

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 .

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms

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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.

2.3. Other hazards

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)

CAS No : 7439-95-4

Substance.

Substance name

Contents

CAS No

Magnesium powder (pyrophoric) :

100 %

7439-95-4

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

4. First aid measures

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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

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

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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

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 :** Wear approved mask.
- **Hand protection :** 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

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9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Solid.

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

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

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

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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

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

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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.

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

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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

IATA - Limited Quantities : 10 kg

ERG-Nr : 3L

15. Regulatory information

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

Safety, health and environmental : Ensure all national/local regulations are observed.
regulations/legislation specific for the substance or mixture

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. Other information

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

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Further information : None.

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