Section 1 Chemical Product and Company Information



CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product MAGNESIUM METAL, COATED POWDER

Synonyms | Magnesium / Magnesium Granules

Section 2 Hazards Identification

Signal word: DANGER Pictograms: GHS02 Target organs: None known



GHS Classification:

Flammable solid (Category 1)

GHS Label information: Hazard statement:

H228: Flammable solid

Precautionary statement:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P370+P378: In case of fire: Use graphite powder, soda ash, powdered sodium chloride, or an appropriate metal-fire-extinguishing dry powder to extinguish.

Supplemental information:

Magnesium will react with water liberating hydrogen gas. These products exhibit reduced tendency to liberate hydrogen gas in contact with water due to safety coating.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3 Composition / Information on Ingredients								
Chemical Name	CAS#	%	EINECS					
Magnesium* Proprietary fire retardant *May contain either calcium oxide, aluminum oxide and	7439-95-4 Undisclosed /or magnesium oxide.	>97% Undisclosed	231-104-6 Undisclosed					
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Section 4 First Aid Measures

INGESTION: CAUSES BURNING SENSATION IN THE MOUTH. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE BURNS AND CORNEAL ABRASIONS. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower evelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Smother fires with dry graphite or dry sand, G-1 powder, or Purple K. DO NOT use water, foam or halogenated extinguishing agents or CO₂. **Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear.

Specific Hazards: Direct viewing of magnesium fires may result in eye injury. Use of water on a magnesium fire will generate hydrogen gas that may cause an explosion. Irritating fumes may be emitted during burning. Magnesium fires emit a thick white smoke. Magnesium fires which have been smothered by the extinguishing media listed above may appear to be out, but may reignite if the material is disturbed and is re-exposed to air or water. Magnesium fires should be constantly attended to be sure re-ignition does not occur.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Using non-sparking tools, sweep up and place in a suitable container for proper disposal. Wash spill area with soap and water.

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Section 7 Handling & Storage Page E2 of E2

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources. Keep away from water and moisture.

Section 8	Exposure Controls / Personal Protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits.	Magnesium	Not established	Not established	Not established			

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid. White coated, metal powder

Odor: No odor.

Odor threshold: Data not available.

pH: Data not available.

Melting / Freezing point: 651°C (1202°F)

Boiling point: Data not available

Flash point: Unknown

Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available

Vapor density (Air = 1): Data not available Relative density (Specific gravity): Approximately 55 lb/ft³

Solubility(ies): Negligible in water.

Partition coefficient: Data not available

Auto-ignition temperature: Data not available

Decomposition temperature: Data not available.

Viscosity: Data not available. Molecular formula: Mg Molecular weight: 24.31

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Avoid moisture, water, acids, and ignition sources. Avoid creating dusty conditions.

Incompatible materials: Acids, water, halogens, hydrogen fluoride, sodium chloride.

Hazardous decomposition products: Hydrogen.

Section 11 Toxicological Information

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation may cause cough, sore throat, shortness of breath.

Ingestion: Ingestion causes burning sensation in the mouth and may cause abdominal pain and diarrhea. Skin: Particles imbedded in the skin may cause eruptions. Molten magnesium may cause serious skin burns.

Eyes: Contact with eyes may cause irritation and corneal scratches. Avoid direct viewing of magnesium fires as eye injury may result, use fire glasses.

Signs and symptoms of exposure: Exposure to magnesium oxide fume subsequent to burning can result in metal fume fever. The temporary symptoms can include fever, chills, nausea, vomiting and muscular pain. Onset of symptoms occurs 4-12 hours after exposure. Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: OM2100000

Section 12 Ecological Information

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

Bioaccumulative potential: No data available

PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: UN2950 Shipping name: Magnesium, granules, coated

Hazard class: 4.3 Packing group: III Reportable Quantity: No Marine pollutant: No

Exceptions: Limited quantity equal to or less than 1 Kg 2012 ERG Guide # 138

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification	
Magnesium	Listed	Not listed	D001	Listed	Not listed	B4; B6	

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

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