

Safety Data Sheet

Magnesium Metal

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Magnesium Metal

Synonyms/Generic Names: Magnesium turnings; Magnesium sticks

SDS Number: 426.20

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information Contact: Ward's Science

5100 West Henrietta Rd. PO Box 92912-9012 Rochester, NY 14692

(800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Flammable solid

Target Organs: None

Signal Words: Warning

Pictograms:



GHS Classification:

Flammable solids	Category 2
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GHS Label Elements, including precautionary statements:

Hazard Statements:

H228	Flammable solid
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Precautionary Statements:

P210 Keep away from	heat/sparks/open flames/ho	ot surfaces. –No smoking.
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Potential Health Effects

Eyes	May cause eye irritation.	
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.	
Skin	May be harmful if absorbed through skin. May cause skin irritation.	
Ingestion	May be harmful if swallowed.	

NFPA Ratings

Health	0
Flammability	1
Reactivity	2
Specific hazard	Not Available

HMIS Ratings

Health	1
Fire	3
Reactivity	2
Personal	Е

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Magnesium	100	74-39-95-4	231-104-6	Mg	24.31 g/mol

4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water and seek medical attention if necessary.	
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not	
	breathing, give artificial respiration. Get medical attention if necessary.	
Skin	Wash off with soap and plenty of water. Get medical attention if necessary.	
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If	
	conscious, wash out mouth with water. Get medical attention if necessary.	

5. FIREFIGHTING MEASURES

Suitable (and unsuitable)	Use water spray, alcohol-resistant foam, dry chemical, or carbon	
extinguishing media	dioxide. Use water spray to cool unopened containers.	
Special protective equipment	t Wear self-contained breathing apparatus for firefighting if necessary.	
and precautions for firefighters		
Specific hazards arising from	Emits toxic fumes (magnesium oxide) under fire conditions. (See also	
the chemical	Stability and Reactivity section).	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition.	
Environmental precautions	Prevent spillage from entering drains. Any release to the environment	
	may be subject to a federal/national or local reporting requirements.	
Methods and materials for	Pick up/sweep up and keep in suitable, closed containers for disposal.	
containment and cleaning up	Clean surfaces thoroughly with water to remove residual contamination.	
	Dispose of all waste or cleanup materials in accordance with local regulations.	

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7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No smoking. Take measures to prevent build up of electrostatic charge.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Silver to white chips
Odor	Odorless
Odor threshold	Not applicable
рН	Not Available
Melting point/freezing point	648°C (1198°F) – lit.
Initial boiling point and boiling range	1090°C (1994°F) – lit.
Flash point	Not Applicable
Evaporation rate	Not Available
Flammability (solid, gas)	Flammable solid.
Upper/lower flammability or explosive limit	Not Available
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	Not Available
Solubility (ies)	Decomposes in contact with water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

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10. STABILITY AND REACTIVITY

Chemical Stability	Stable	
Possibility of Hazardous Reactions	Will not occur.	
Conditions to Avoid	Heat, flame, sparks. Extremes of temperature and sunlight.	
Incompatible Materials	Strong oxidizing agents, water, acids, methanol, hydrogen peroxide, sulfur compounds, metal oxides, Tellurium, Ethylene oxide, Alkali carbonates, silver nitrate, soluble carbonates and phosphates, carbides.	
Hazardous Decomposition Products	Magnesium oxide.	

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

Carcinogenicity

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IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Eyes	May cause eye irritation.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Ingestion	May be harmful if swallowed.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

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13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste products or residues.
Product Containers	Users should review their operations in terms of the applicable federal/national or
	local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN1869, Magnesium, 4.1, pg III
TDG	UN1869, MAGNESIUM, 4.1, pg III
IMDG	UN1869, MAGNESIUM, 4.1, pg III
Marine Pollutant	No
IATA/ICAO	UN1869, Magnesium, 4.1, pg III

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Magnesium
SARA 312	Magnesium
SARA 313	Not Listed
WHMIS Canada	Class B-4: Flammable solid.
	Class B-6: Reactive and very flammable material.

16. OTHER INFORMATION

Revision	Date
Revision 1	01/31/2013

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