Material Safety Data Sheet

Magnesium, turnings and ribbons

MSDS# 13290

Section 1 - Chemical Product and Company Identification

MSDS Name:	Magnesium, turnings and ribbons
Catalog Numbers:	AC191080000, AC191080025, AC191085000, M11-500, M8-1OZ, M8-212, NC9327500
Synonyms:	Magnesium metal (ribbons/turnings)
Company Identification:	Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	201-796-7100
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#:	7439-95-4
Chemical Name:	Magnesium
%:	>99
EINECS#:	231-104-6

Hazard Symbols: F

Risk Phrases: 11 15

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable solid. Water-reactive. Air sensitive. Inhalation of fumes may cause metal-fume fever. May cause eye, skin, and respiratory tract irritation. Contact with water liberates extremely flammable gases. Target Organs: None.

Potential Health Effects

Eye:	Dust may cause mechanical irritation.
Skin:	Dust may cause mechanical irritation. May be harmful if absorbed through the skin. Particles embedded in the skin may cause "chemical gas gangrene" with symptoms of persistent lesions, inflammation and gas bubbles under the skin.
Ingestion:	May cause irritation of the digestive tract. Low hazard for usual industrial handling.
Inhalation:	May cause respiratory tract irritation. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. May be harmful if inhaled.
Chronic:	No information found.

Section 4 - First Aid Measures

Eyes:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:	Get medical aid. Rinse area with large amounts of water for at least 15 minutes.
Ingestion:	Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.
	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If

Inhalation: breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Antidote: The use of Dimercaprol or BAL (British Anti-Lewisite) as a chelating agent should be determined by qualified medical personnel.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water reactive. Material will react with water and may release a flammable and/or toxic gas. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion. Flammable solid. May react with acids or moisture to form explosive hydrogen gas.

Extinguishing Media: Use approved class D extinguishing agents or smother with dry sand, clay, or sodium bicarbonate. Do NOT use water, carbon dioxide, or foam.

Autoignition Temperature: 472.8 deg C (883.04 deg F)

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 0; flammability: 1; instability: 1;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Scoop up with a nonsparking tool, then place into a suitable container for disposal. Avoid generating dusty conditions. Remove all sources of ignition. Place under an inert atmosphere.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Store protected from air. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Water free area.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Magnesium	none listed	none listed	none listed

OSHA Vacated PELs: Magnesium: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles and face shield.

Skin: Wear impervious gloves.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Solid
Color:	silver white
Odor:	none reported
pH:	>7 (water solution)
Vapor Pressure:	Negligible.
Vapor Density:	Negligible.
Evaporation Rate:	Negligible.
Viscosity:	Not available
Boiling Point:	1107.2 deg C (2,024.96°F)
Freezing/Melting Point:	650 deg C (1,202.00°F)
Decomposition Temperature:	Not available
Solubility in water:	Insoluble in water.
Specific Gravity/Density:	1.74
Molecular Formula:	Mg
Molecular Weight:	24.3

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures. Air sensitive. Reacts with water.
Conditions to Avoid:	Ignition sources, exposure to air, contact with water.
Incompatibilities with Other Materials	Strong oxidizing agents, acids, chlorinated solvents, halogens, acid chlorides.
Hazardous Decomposition Products	Oxides of magnesium.
Hazardous Polymerization	Has not been reported.

Section 11 - Toxicological Information

RTECS#:	CAS# 7439-95-4: FW6475100
LD50/LC50:	RTECS: Not available.
Carcinogenicity:	Magnesium - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: MAGNESIUM
Hazard Class: 4.1
UN Number: UN1869
Packing Group: III
Canada TDG
Shipping Name: MAGNESIUM POWDER
Hazard Class: 4.3(4.2)
UN Number: UN1418
Packing Group: III

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F

Risk Phrases:

R 11 Highly flammable.

R 15 Contact with water liberates extremely flammable gases.

Safety Phrases:

S 7/8 Keep container tightly closed and dry.

S 43A In case of fire, use dry chemical (never use water).

WGK (Water Danger/Protection)

CAS# 7439-95-4: Not available

Canada

CAS# 7439-95-4 is listed on Canada's DSL List

Canadian WHMIS Classifications: B4

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 7439-95-4 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7439-95-4 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 12/12/1997

Revision #8 Date 7/20/2009
