E-Mail: sds@finemetalscorp.com
www.FineMetalsCorp.com

15117 Washington Highway **Phone: (804) 227-3381** **CHEMTREC: (800) 424-9300**
P. O. Box 1055 Ashland VA **Fax: (804) 227-3404** **Poision Center: (800) 562-8236**

Safety Data Sheet

Section 1: Product and Company Information

Product Name: Magnesium

Company: Fine Metals Corporation
15117 Washington Hwy
Ashland, VA 23005

For more information call: 1-804-227-3381
(Monday - Friday 9-4:30)

In case of emergency: Transportation (Chemtrec) 1-800-424-9300
Poison Center: 1-800-562-8236
(24 hours/day, 7 days/week

Section 2: HAZARD IDENTIFICATION

Emergency Overview

Emergency Warning! Flammable solid. Water-reactive. Contact with water liberates extremely flammable gases. May cause eye and skin irritation. May cause respiratory tract irritation. Inhalation of fumes may cause metal fume fever. Air sensitive

Hazard Statements: H228: Flammable solid H251: Self-heating; may catch fire H261: In contact with water releases flammable gases

Precautionary Statements:

Prevention: P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking P223: Keep away from possible contact with water, because of violent reaction and possible flash fire. P335&378: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages P402&P404: Store in dry place. Store in a closed container.

Respnse: P370&P378: In case of fire - Use dry sand, dry chemical or alcohol-resistent foam for extinction.

Appearance / Form:

Form: Solid
Color: Silver grey solid
Odor: None

Hazard Summary: Flammable solid. Water reactive. Not considered a health hazard in the form sold.

Acute Health Effects

Skin: May cause skin irritation.
Eyes: Contact may cause eye irritation.
Ingestion: Low ingestion hazard in normal use.
Inhalation: May cause respiratory irritation.

Chronic Exposure: Inhaltion of dusts or fumes may irritate the respiratory tract and may cause metal fume fever. Symptoms may include coughing, chest pain, fever, and leukocytosis. May cause abdominal pain and diarrhea. Skin contact: Particles embedded in the skin may cause eruptions.

Aggravated Medical Conditions: Existing wounds contaminated with magnesium are very slow to heal.

Carcinogenicity: No effect known

Section 3: Composition/Information on Ingredients

Chemical Name	CAS-No.		Reach #	
Magnesium	7439-95-4	Not available	231-104-6	>99 wt%

Section 4: FIRST AID MEASURES

Eye Contact: Flush eyes with water for at least 15 min. occasionally lifting upper and lower lids and seek medical attention.

Skin Contact: Wash with soap and water. Remove contaminated clothing. If irritation occurs seek medical attention.

Inhalation: Remove to fresh air if breathing difficulty occurs and seek medical attention.

Ingestion: If swallowed DO NOT INDUCE VOMITING. Give large quantities of water. May cause irritation to gastrointestinal system. Seek medical attention immediately.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing Media: Class D fire extinguishers, metal extinguishing powders, dry sand, MetL-X powder, graphite powder, soda ash, or talc.

Unsuitable extinguishing media: Do not use water, carbon dioxide, or foam.

Specific hazards during firefighting: Water Reactive. Material may react with water and may release a flammable and/or toxic gas. Dusts at sufficient concentrations can form explosive mixtures with air.

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.

Environmental Precautions: Do not release to the environment.

Methods for Cleaning Up: Isolate spill area. Collect the spilled material with a nonsparking tool and transfer to a clean, dry metal covered container for recovery or disposal. Do not use water in the collection process. If the spilled magnesium has come into contact with water, proceed with caution. Hydrogen gas may be generated, which may cause a fire or explosion.

Section 7: HANDLING AND STORAGE

Handling: Practice reasonable care in handling magnesium and magnesium alloy product forms to avoid product damage and/or personal injury. Keep area dry. Do not allow dust or turnings to accumulate.

Storage: Store product in dry location. Keep in tightly closed container. Wet, moist or high humidity storage conditions will lead to corrosion of the product and possible fire danger. Store away from other combustibles. Storage and use areas should be No Smoking areas. See National Fire Protection Association Bulletin NFPA 48, "Storage, Handling and Processing of Magnesium" for detailed storage information. Wash thoroughly after handling. Use with adequate ventilation. Empty containers retain product residue and can be dangerous.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation or other means to maintain employee exposure as far below limits as possible

Component Exposure Limits

Component	Location	Value
Magnesium	No exposure limits	

Engineering Controls: Use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below recommended exposure limits.

Respiratory Protection: Not normally needed. If ventilation is inadequate and this material is handled at elevated temperatures or dust/fumes/mists are generated a NIOSH/MSHA approved air purifying respirator with a manufacturers approved cartridge or canister may be permissible under certain circumstances.

Eye/Face: Wear safety glasses or goggles as appropriate to the task performed.

Skin Protection: Protective gloves are recommended during handling of fines.

Work Hygienic Practices: Practice good chemical hygiene.

Comments: Do not allow dust or turnings to build up in area.

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid
Odor: None
Color: Silver grey
Melting Point: 650° C
Boilling Point: 1107° C
Vapor Pressure: 1.0 at 621° C
Vapor Density (air = 1): NA
Evaporation Rate: NA
Solubility In Water: Reacts with water
Specific Gravity (water = 1): 1.74 at 20° C
Atomic Weight: 24.30
% Volatility By Volume: Reacts dangerously with many substances including oxidizers, carbonates, cyanides, chlorinated hydrocarbons, sulfates, acids and other metals.
Density: 1.738

Section 10: STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage. Slowly oxidizes in moist air.
Incompatible Materials: Water, strong acids, strong bases, oxidizing materials, sulphur compounds halogens
Hazardous Decomposition Products: Toxic metal forms
Possibility of Hazardous Reactions: Reacts dangerously with many substances including oxidizers, carbonates, cyanides, chlorinated hydrocarbons, sulfates, acids and other metals.

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: No LD50/LC50 information found relating to normal routes of occupational exposure.
Chronic Toxicity: Not available
Reproductive Toxicity: Not available.
Mutagenicity: Not available
Carcinogenicity: Not available
Other: None

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Magnesium powder is not suspected of being highly harmful to the environment. As magnesium oxide an aquatic toxicity rating of tlm 1000 ppm has been established.
Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste Classification: Recycling is disposal method of choice.
All disposal activities must comply with federal, state, provincial and local regulations.

Section 14: TRANSPORT INFORMATION

US DOT (ground): DOT designation: Flammable solid, dangerous when wet. Cited as hazardous substance by DOT and NFPA. Hazard Class: 4.1, UN/NA: UN1869, Packing group III
ICAO / IATA (air): Hazard Class: 4.1, UN/NA: UN1869, Packing group III
IMO / IMDG (water): Hazard Class: 4.1, UN/NA: UN1869, Packing group III
Special Provisions: Hazard Class: 4.1, UN/NA: UN1869, Packing group III

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Section 15: REGULATORY INFORMATION

UNITED STATES

SARA Title III (Superfund Amendments and Reauthorization Act) 313 Reportable Ingredients: No

TSCA (Toxic Substance Control Act) status: Not regulated.

STATE REGULATIONS

The following components appear in one or more of the following states hazardous substances

Component	CAS #	CA	MA	MN	NJ
Magnesium	7439-95-4	No	Yes	No	Yes	Yes	Yes

California Proposition 65: This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reporductive harm.

CANADA

WHMIS (Workplace Hazardous Materials Information System): Not regulated.

Domestic Substance List (Inventory): All components of this product are included in inventory, exempt, or notified.

GENERAL COMMENTS

None

Section 16: OTHER INFORMATION

Information Contact: sds@finemetalscorp.com

Issue Date: 7/6/1999
Revision Date: 1/1/2015

HMIS®(II)		NFPA
Health:	**0**	
Flammability:	**1**	1
Reactivity:	**1**	0 1
PPE:	**B**	W

Ratings range from 0 (no hazard) to 4 (severe hazard)

The information contained in this SDS is believed to be correct, but is not all inclusive and shall be used only as a guide. Fine Metals Corporation shall not be liable for any damage resulting from handling or from contact with the product listed in the SDS. Any comments or questions should be directed to:

Safety Manager
Fine Metals Corporation
15117 Washington Highway
P O Box 1055
Ashland VA 23005
(804) 227-3381