

Magnesium  
13290

\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: Magnesium

Catalog Numbers:

S71961, S71962, S75532, S75551, S75551-1, S75551-2, M11 500, M11-500,  
M11500, M7 100, M7100, M8 10Z, M8-10Z, M810Z, NC9739979, S72233D,  
S755511,  
S755512, XXM1140KG

Synonyms:

Magnesium Metal (ribbons/turnings)

Company Identification: Fisher Scientific  
1 Reagent Lane  
Fairlawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

| CAS#      | Chemical Name | %   | EINECS#   |
|-----------|---------------|-----|-----------|
| 7439-95-4 | MAGNESIUM     | >99 | 231-104-6 |

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

EMERGENCY OVERVIEW

Appearance: silver white.

Warning! Flammable solid. May cause respiratory tract irritation.

Water-Reactive. May cause mechanical eye and skin irritation.

Inhalation of fumes may cause metal-fume fever.

Target Organs: None.

Potential Health Effects

Eye:

Dust may cause mechanical irritation.

Skin:

Dust may cause mechanical irritation. 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.

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. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

The use of calcium gluconate as antidotal treatment for magnesium overdose should be determined only by qualified medical personnel (Medical Toxicology,

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. Flammable solid. May react with acids or moisture to form explosive hydrogen gas.

Extinguishing Media:

Use only graphite powder, soda ash, powdered sodium chloride, or an appropriate metal-fire-extinguishing dry powder. Do NOT use water, carbon dioxide, or foam.

\*\*\*\* 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. Remove all sources of ignition.

\*\*\*\* 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. 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.

\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

| Chemical Name | ACGIH       | NIOSH       | OSHA-Final PELs |
|---------------|-------------|-------------|-----------------|
| MAGNESIUM     | none listed | none listed | none listed     |

OSHA Vacated PELs:

MAGNESIUM:

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear chemical 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 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Physical State: Solid  
Appearance: silver white  
Odor: None reported  
pH: >7 (water solution)  
Vapor Pressure: Negligible.  
Vapor Density: Negligible.  
Evaporation Rate: Negligible.  
Viscosity: Not available.  
Boiling Point: 2025 deg F  
Freezing/Melting Point: 1204 deg F  
Autoignition Temperature: 1204 deg F ( 651.11 deg C)  
Flash Point: Not applicable.  
NFPA Rating:  
Explosion Limits, Lower: Not available.  
Upper: Not available.  
Decomposition Temperature: Not available.  
Solubility: Insoluble in water.  
Specific Gravity/Density: 1.74 (water=1)  
Molecular Formula: Mg  
Molecular Weight: 24.305

\*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, exposure to air, contact with water.

Incompatibilities with Other Materials:

Oxygen, moisture, chlorinated solvents, methanol, hydrogen peroxide, oxidizing agents, sulfur compounds, metal oxides, metal cyanides, metal oxide salts, fluorine, carbonates, halogens, phosphates.

Hazardous Decomposition Products:

Oxides of magnesium.

Hazardous Polymerization: Has not been reported.

\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

RTECS#:

CAS# 7439-95-4: OM2100000

LD50/LC50:

Not available.

Carcinogenicity:

MAGNESIUM -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:

No information available.

Teratogenicity:

No information available.

Reproductive Effects:

No information available.

Neurotoxicity:

No information available.

Mutagenicity:

No information available.

Other Studies:

None.

\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

Other

No information available.

\*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Chemical waste generators must determine whether a discarded chemical is class if as a hazardous waste.US EPA guidelines for the classification determination are listed in 40 CFR Part Additionally, waste generators must consult state and local hazardous waste regu ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

\*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

US DOT

Shipping Name: MAGNESIUM

Hazard Class: 4.1

UN Number: UN1869  
Packing Group: III  
Canadian TDG  
Shipping Name: MAGNESIUM POWDER  
Hazard Class: 4.3(4.2)  
UN Number: UN1418

\*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

US FEDERAL

TSCA

CAS# 7439-95-4 is listed on the TSCA inventory.  
Health & Safety Reporting List  
None of the chemicals are on the Health & Safety Reporting List.  
Chemical Test Rules  
None of the chemicals in this product are under a Chemical Test Rule.  
Section 12b  
None of the chemicals are listed under TSCA Section 12b.  
TSCA Significant New Use Rule  
None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)  
None of the chemicals in this material have an RQ.  
Section 302 (TPQ)  
None of the chemicals in this product have a TPQ.  
SARA Codes  
CAS # 7439-95-4: acute, flammable, reactive.  
Section 313  
No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.  
This material does not contain any Class 1 Ozone depleters.  
This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.  
None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly Hazardous by OSHA.

STATE

MAGNESIUM can be found on the following state right to know lists:  
California, New Jersey, Florida, Pennsylvania, Massachusetts.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives  
Hazard Symbols: Not available.  
Risk Phrases:  
Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7439-95-4: No information available.

United Kingdom Occupational Exposure Limits

Canada

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

This product has a WHMIS classification of B4, D2B.

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

Exposure Limits

\*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

MSDS Creation Date: 12/12/1997 Revision #1 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

---