

## SECTION 1: PRODUCT DESCRIPTION

### PRODUCT IDENTIFIER

Product form: Solid  
 Product Name: MAGNESIUM  
 Formula: Mg

### SUPPLIER

**NATHAN TROTTER & COMPANY**  
**241 W. STEWART HUSTON DRIVE**  
**COATESVILLE, PA 19320**  
**PH. 610-524-1440**  
**FX. 610-524-2496**

### INTENDED USE OF PRODUCT

Use: Industrial; professional use only

### EMERGENCY TELEPHONE NUMBER

CHEMTREC 24 HR Emergency number: 1-800-424-9300  
 INTERNATIONAL CHEMTREC call: 1-703-527-3887

## SECTION 2: HAZARD IDENTIFICATION

### GHS CLASSIFICATION:

Flammable Solid Category 1, Substance or mixture which in contact with water emits flammable gas Category 1



### HAZARD STATEMENTS:

- H228: Flammable solid.
- H260: In contact with water releases flammable gases which may spontaneously ignite.

# DANGER

### PRECAUTIONARY STATEMENTS:

- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P223: Do not allow contact with water
- P241: Use explosion proof electrical/ventilating/lighting equipment.
- P280: Wear protective clothing/gloves/eye protection/face protection
- P370: In case of fire, use dry chemical or dry chemical or cover with dry sand or lime.\*\*Water increases risk\*\*
- P402: Store in a dry place in sealed container.
- P501: Dispose of contents in accordance with local and federal regulations

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE			
Name	Product Identifier	%	Classification (GHS-US)
Magnesium Metal	7439-95-4	100	See section 2

## SECTION 4: FIRST AID MEASURES

**General First-aid Measures:** Under normal handling and use, exposure to solid forms of this material present few health hazards. Subsequent operations such as grinding, melting or welding may produce hazardous dust or fumes which can be inhaled or come in contact with the skin or eyes.

**INHALATION:** Remove to fresh air, keep warm and quiet, give oxygen if breathing is difficult. Seek medical attention if symptoms persist.

**INGESTION:** Rinse mouth with water. Do not induce vomiting. Seek medical attention if symptoms persist. Never induce vomiting or give anything by mouth to an unconscious person.

**SKIN:** Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

**EYES:** Flush eyes with lukewarm water, including under upper and lower eyelids, for at least 15 minutes. Seek medical attention.

## SECTION 5: FIRE FIGHTING PROCEDURES

**Extinguishing Media:** Use dry chemical or cover with dry sand or lime.

**Unsuitable Extinguishing Media:** Water.

**Specific Hazards Arising from the Material:** When substance is in contact with water, flammable gases will be produced. Fire and excessive heat may produce hazardous decomposition products and/or metal fumes.

**Special Protective Equipment and Precautions for Firefighters:** Full face, self-contained breathing apparatus and full protective clothing.

## SECTION 6: SPILL OR LEAK MEASURES/PROCEDURES

**Personal Precautions, Protective Equipment, and Emergency Procedures:**

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Avoid the generation of dusts during clean-up. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Do not flush spill to drain.

## SECTION 7: HANDLING AND STORAGE

**Handling:** Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Protect from moisture. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Wear protective gloves/protective clothing/eye protection/face protection.

**Storage:** Store in a dry place. Store in a closed container.

**Storage Code:** Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

## SECTION 8: PROTECTION INFORMATION

CHEMICAL NAME: Magnesium, METAL

<u>TWA</u>	<u>ACGIH</u>	<u>STEL</u>	<u>TWA</u>	<u>OSHA PEL</u>	<u>STEL</u>
N/A		N/A	N/A		N/A

**CONTROL PARAMETERS/ ENGINEERING MEASURES:** No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** Lab coat, apron, eye wash, safety shower.

**RESPIRATORY PROTECTION:** None required where adequate ventilation is provided.

**EYE PROTECTION:** Safety glasses. Have an eye wash station available.

**SKIN PROTECTION:** Wear gloves, protective clothing as necessary.

## SECTION 9: PHYSICAL DATA

**FORMULA:** Mg

**MOLECULAR WEIGHT:** 24.30 g/mol

**APPEARANCE:** Silver-white solid, metallic

**ODOR:** Odorless

**PHYSICAL STATE:** Solid

**pH:** No data available

**MELTING POINT:** 1203.8 °F (651°C)

**BOILING POINT:** 2024.6°F (1107°C)

**FREEZING POINT:** No data available

**FLAMMABILITY:** No data Available

**FLASH POINT:** 932°F (500°C)

**AUTO IGNITION TEMPERATURE:** 883.4°F (473°C)

**DECOMPOSITION TEMPERATURE:** No data available

**VAPOR PRESSURE :** 1mm Hg at 1149.8°F (621°C)

**SPECIFIC GRAVITY:** 1.738 @ 20°C

**VAPOR DENSITY (Air=1):** 0.84

**Practically Insoluble in water**

## SECTION 10: REACTIVITY DATA

**REACTIVITY:** Moderately reactive - See below.

**CHEMICAL STABILITY:** Stable under normal conditions. (see section 7)

**POSSIBILITY OF HAZARDOUS REACTIONS:** Reacts with water to create flammable gases. Flammable when in contact with high heat and/or flames.

**CONDITIONS TO AVOID:** Avoid water and moisture. Avoid high temperatures.

**INCOMPATIBLE MATERIALS:** Strong oxidizing agents, Carbonates, Ammonium Salts, Cyanide Salts, Ethylene oxide, Halogenated Hydrocarbons, Halogens, Cyanogen

**HAZARDOUS DECOMPOSITION PRODUCTS:** Metal fumes.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## SECTION 11: TOXICITY DATA

**ROUTES OF ENTRY:** Inhalation and ingestion.

**SYMPTOMS (ACUTE):** Respiratory Irritation, Dermatitis, Tremors

**DELAYED EFFECTS:** Gastrointestinal

**ACUTE TOXICITY:**

<u>CHEMICAL NAME:</u>	<u>CAS NUMBER</u>	<u>ORAL LD50</u>	<u>DERMAL LD50</u>	<u>INHALATION LC50</u>
Magnesium, Metal	7439-95-4	Oral LD50 Rat 230mg/kg	N/A	N/A

**CARCINOGENICITY:**

<u>CHEMICAL NAME:</u>	<u>CAS NUMBER</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
Magnesium	7439-95-4	N/L	N/L	N/L

**CHRONIC EFFECTS:**

**MUTAGENICITY:** No evidence of a mutagenic effect.  
**TERATOGENICITY:** No Evidence of a teratogenic effect (Birth defect)  
**SENSITIZATION:** No evidence of a sensitization effect.  
**REPRODUCTIVE:** No evidence of negative reproductive effects.

**TARGET ORGAN EFFECTS:**

**ACUTE:** No data available  
**CHRONIC:** No data available

## SECTION 12: ECOLOGICAL DATA

**OVERVIEW:** Not expected to be harmful to the environment.

**MOBILITY:** N/A

**PERSISTANCE:** Chemically Transformed

**BIOACCUMULATION:** N/A

**DEGRADABILITY:** Naturally occurring element. Does not biodegrade

**OTHER ADVERSE EFFECTS:** N/A

## SECTION 13: DISPOSAL INFORMATION

**DISPOSAL METHODS:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance

**WASTE DISPOSAL CODE(S):** Not determined

## SECTION 14: TRANSPORT INFORMATION

**GROUND- DOT PROPER SHIPPING NAME:**

Not regulated for ground transport by IATA

**AIR- IATA PROPER SHIPPING NAME:**

Not regulated for air transport by IATA.

## SECTION 15: REGULATORY INFORMATION

**TSCA STATUS:** All components in this product are on the TSCA Inventory.

CHEMICAL NAME:	CAS NUMBER	§ 313 NAME	§ 313 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Magnesium, Metal	7439-95-4	No	No	No	No	No

## SECTION 16: ADDITIONAL INFORMATION

**REVISED: MAY 2015**

The information contained in this document is based on the state of our knowledge at the time of publication and is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Nathan Trotter and Company makes no representation, warranty, or guarantee of any kind with respect to the information contained in this document or any use of the product based on this information. Nathan Trotter and Company shall not be held liable for any damages resulting from handling or from contact with the above product. Users should satisfy themselves that they have all current data relevant to their particular use.

**ACGIH:** American Conference of Governmental Industrial Hygienists

**NTP:** National Toxicology Program

**CAS:** Chemical Abstract Service Number

**OSHA:** Occupational Safety and Health Administration

**CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act

**PEL:** Permissible Exposure Limit

**DOT:** U.S. Department of Transportation

**PPM:** Parts per million

**IARC:** International Agency for Research on Cancer

**RCRA:** Resource Conservation and Recovery Act

**SARA:** Superfund Amendments and Reauthorization Act

**N/A:** Not Available

**TLV:** Threshold Limit Value

**TSCA:** Toxic Substances Control Act

**IDLH:** Immediately dangerous to life and health