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American Scientific, LLC

Safety Data Sheet

Section 1

Product Description

Magnesium, Ribbon

Product Name:	Magnesium, Ribbon
Recommended Use:	Science education applications
Synonyms:	None known
Manufacturer:	American Scientific, LLC 6420 Fiesta Drive, Columbus, OH 43235
Chemical Information:	800-227-1150 (8am-5pm (ET) M-F)
Chemtrec for Emergency:	800-424-9300 (Transportation Spill Response 24 hours)
Phone Number for Information:	(614) 764-9002
Fax Number for Information:	(614) 764-9043

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



Flammable solid. In contact with water releases flammable gases which may ignite spontaneously.

GHS Classification:

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

Acute Toxicity Dermal Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Gas Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

Chemical Name Magnesium Ribbon

CAS #7439-95-4

100%

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

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

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.

Hazardous Combustion Products: Metal fumes

Section 6 Spill or Leak Procedures

Steps to Take in Case Material is Released or Spilled:

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	TWA	ACGIH	STEL	TWA	OSHA PEL	STEL
Magnesium	N/A	N/A	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:	No respiratory protection required under normal conditions of use.
Respirator Type(s):	None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection

Section 9**Physical Data**

Formula: Mg
Molecular Weight 24.30
Appearance: Silver-White Solid
Odor: None
Odor Threshold: No data available
pH: No data available
Melting Point: 651 C
Boiling Point: 1107 C
Flash Point: 500 C
Flammable Limits in Air: No data available

Vapor Pressure: 1 mmHg at 621 C
Evaporation Rate (BuAc=1): No data available
Vapor Density: (Air=1) 0.84
Specific Gravity: 1.738 @ 20 deg C
Solubility in Water: Practically Insoluble
Log Pow (calculated): No data available
Autoignition Temperature: 473 C
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: No data available

Section 10**Reactivity Data**

Reactivity:	Moderately reactive – see below
Chemical Stability:	Stable under normal conditions
Conditions to Avoid:	Exposure to moisture
Incompatible Materials:	Strong oxidizing agents, Carboinates, Ammonium Salts, Cyanide Salts, Ethylene oxide, Halogenated Hydrocarbons, Halogens, Cyanogen
Hazardous Decomposition Products:	Metal Fumes
Hazardous Polymerization:	Will not occur

Section 11**Toxicity Data****Magnesium Ribbon Toxicity Data**

Acute Toxicity:	CAS Number 7439-95-4	Oral LD50 Oral LD Rat 230	Dermal LD50 Not applicable	Inhalation LC50 Not applicable
Carcinogenicity:	CAS Number 7439-95-4	IARC Not Listed	NTP Not Listed	OSHA Not Listed

Routes of Entry**Symptoms (Acute):****Delayed Effects:****Chronic Effects:****Mutagenicity:****Teratogenicity:****Sensitization:****Reproductive:****Target Organ Effects:****Acute:****Chronic:****Inhalation and ingestion****Respiratory Irritation, Dermatitis, Tremors****Gastrointestinal****No evidence of a mutagenic effect****No evidence of a mutagenic effect****No evidence of a mutagenic effect****No evidence of a mutagenic effect****No data available****No data available****Section 12****Ecological Data**

Overview:	This material is not expected to be harmful to the ecology.
Mobility:	No data
Persistence:	Chemically Transformed
Bioaccumulation:	No data
Degradability:	Naturally occurring element. Does not biodegrade.
Other Adverse Effects:	No data

Chemical Name (Magnesium)	CAS Number 7439-95-4	Eco Toxicity Not applicable
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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:	Ground - DOT Proper Shipping Name:
UN1869	UN1869
Magnesium	Magnesium
Division 4.1	Division 4.1
P.G. III	P.G. III

Section 15**Regulatory Information**

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

Chemical Name: Magnesium

CAS Number: 7439-95-4

§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No	No	No	No	No

Section 16**Additional Information**

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

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
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV IDLH	Threshold Limit Value Immediately dangerous to life and health