

**MATERIAL SAFETY DATA SHEET
FOR
THORN SMITH LABORATORIES
ANALYZED QUANTITATIVE UNKNOWN**

Aluminum-magnesium alloy for Al, Mg
(Also known as Dow Metal)
Catalog Number 80-1010

Manufacturer: Auric Enterprises, Inc.
d/b/a Thorn Smith Laboratories
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MSDS Number: TSL-012
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SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS - Chemical Name and Common Names
(Hazardous Components 1% or greater; Carcinogens 0.1% or greater)

Aluminum

Formula: Al
CAS No.: 7429-90-5
OSHA PEL: N/E
ACGIH TLV: 10 (metal & oxide)
OTHER LIMITS: N/A

Zinc

Formula: Zn
CAS No.: 7440-66-6
OSHA PEL: N/E
ACGIH TLV: 5 mg/m³
OTHER LIMITS: N/A

Magnesium

Formula: Mg
CAS No.: 7439-95-4
OSHA PEL: 2 mg/ m³
ACGIH TLV: 2 mg/ m³
OTHER LIMITS: N/A

Manganese

Formula: Mn
CAS No.: 7439-96-5
OSHA PEL: 5 mg/m³
ACGIH TLV: 5 mg/m³
OTHER LIMITS: N/A

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: N/A
Specific Gravity: (H₂O=1) >8
Vapor Pressure (mm Hg & Temperature): N/A
Melting Point: >800° C (>1500° F)
Vapor Density (Air=1): N/A
Evaporation Rate (=1): N/A
Solubility in Water: Negligible (<0.1%)
Water Reactive: No
Appearance and Odor: Gray. Odorless.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method Used: N/A
Auto-Ignition Temperature: N/A
Flammability Limits in Air (% by Volume): N/A
LEL: N/A UEL: N/A
Extinguisher Media: Use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures: Product in the solid state presents no explosion hazard.
Unusual Fire and Explosion Hazards: Burns in air; continues to burn in a current of steam. Toxic gases, aerosols, and vapors may be released in a fire involving alloys if fumes of other compounds or other contacting materials are involved.

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY: Stable Unstable
Conditions to Avoid: Exposure during storage to strong acids, bases, or oxidizing agents.
Incompatibility (Materials to avoid): Reacts with acids to form hydrogen.
Hazardous Decomposition Products: Toxic gases, aerosols, and vapors may be released in a fire involving alloys if fumes of other compounds or other contacting materials are involved.

HAZARDOUS POLYMERIZATION: _____ May Occur Will Not Occur
Conditions to Avoid: No information found.

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY:

Inhalation Ingestion Skin Contact Eye Contact
 Not Hazardous

CARCINOGEN LISTED IN:

NTP OSHA IARC Monograph Not Listed

TOXICITY: No information found.

HEALTH HAZARDS - Acute:

Inhalation: Inhalation of high concentrations of freshly formed oxide fumes may cause metal fume fever characterized by a metallic taste in the mouth, dryness and irritation of the throat, and influenza-like symptoms. Symptoms of poisoning include abdominal cramps, anemia, muscle weakness, and headache.

Ingestion: Symptoms of poisoning include abdominal cramps, anemia, muscle weakness, and headache

Skin Contact: May cause irritation.

Eye Contact: May cause irritation.

HEALTH HAZARDS - Chronic: Inhalation or ingestion of particles may result in metal fume fever.

Signs and Symptoms of Exposure: No information found.

Medical Conditions Generally Aggravated by Exposure: None identified.

EMERGENCY FIRST AID PROCEDURES: - Seek medical assistance for further treatment, observation and support if necessary.

Inhalation: If a person breathes in large amounts, move the exposed person to fresh air. Get medical attention.

Ingestion: Get medical attention.

Skin Contact: Remove any contaminated clothing. Wipe off excess from skin. Particles embedded in skin can produce blebs with a protracted course. Immediately wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Eye Contact: Immediately flush with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention immediately.

SARA TITLE III HAZARD CATEGORIES AND LISTS

Acute: Yes Chronic: Yes Flammability: Yes Pressure: No
Reactivity: No

Extremely Hazardous Substance: No

CERCLA Hazardous Substance: No
SARA 313 Toxic Chemicals: Yes Al, Yes Mn, Yes Zn
TSCA Inventory: No

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type): NIOSH/MSHA approved dust/fume respirator should be used to avoid excessive inhalation of particulates when exposure exceeds TLV's.

Protective Gloves: Wear protective gloves.

Eye Protection: Wear chemical safety glasses.

VENTILATION TO BE USED: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.

Local Exhaust Mechanical (General) Special
 Other (Specify)

Other Protective Clothing and Equipment: Wear clean body-covering clothing.

Hygienic Work Practices: Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Avoid flames and fire.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES

Steps to be taken if material is spilled or released: Not Applicable.

Waste Disposal Methods: Dispose in accordance with all applicable local, state, and federal environmental regulations.

Precautions to be taken in handling and storage: Store in accordance with all local, state, and federal environmental regulations. Keep away from fire and/or sparks.

Other precautions and/or special hazards: No information available.

NFPA Rating: Health: **1** Flammability: **1** Reactivity: **2**

HMIS Rating: No information available.

SECTION 8 - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

Domestic (D.O.T.)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

International (T.M.O.)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

AIR (I.C.A.O.)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

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