

Heeger Materials Inc.  
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In Case Of Emergency Call  
(U.S.) 800-424-9300  
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## Magnesium Aluminum Alloy Safety Data Sheet

### 1. Product and Company

Product name: Magnesium Aluminum Alloy

Synonym: None

CAS-No.: Magnesium 7439-95-4  
Aluminum 7429-90-5

Company: Heeger Materials Inc.  
230 Steele St.  
Denver, CO 80206

Telephone: 925-385-8104

Emergency telephone number

Emergency Phone #: Chemtrec US: 800-424-9300  
ChemTel International: +1-813-248-0585

| HMIS Rating         |   |
|---------------------|---|
| Health              | 1 |
| Flammability        | 2 |
| Reactivity          | 2 |
| Personal Protection | E |

### 2. Hazards

#### GHS Label elements

GHS Classification: Substances and mixtures, which in contact with water, emit flammable gases (Category 2), H261

Pictogram(s)



Signal word **DANGER**

Hazard statement(s)

H250 Catches fire spontaneously if exposed to air.

H261 In contact with water releases flammable gases.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P222 Do not allow contact with air.

P223 Do not allow contact with water

P280 Wear protective gloves/protective clothing/eye protection/face protection

P334 + P335 Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages

P370 + P378 Use for extinction: Dry sand or alcohol-resistant foam.

P402 + P404 Store in a dry place. Store in a closed container.

**Hazards not otherwise classified (HNOC) or not covered by GHS**

Combustible dust.

**3. Composition/Ingredients**

**Substance**

Formula: N/A

Molecular weight: N/A

CAS-No.: 7439-95-4 & 7429-90-5

| Material  | CAS       | %      | OSHA                                     | ACGIH                                    |
|-----------|-----------|--------|--|--|
| Magnesium | 7439-95-4 | 35-65% | 15 mg/m <sup>3</sup> as<br>Nuisance Dust | 15 mg/m <sup>3</sup> as<br>Nuisance Dust |
| Aluminum  | 7429-90-5 | 35-65% | 15 mg/m <sup>3</sup> as<br>Nuisance Dust | 15 mg/m <sup>3</sup> as<br>Nuisance Dust |

**4. First Aid**

**First Aid For Eye:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

**First Aid For Skin:** In case of contact, flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.

**First Aid For Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**First Aid For Ingestion:** If swallowed, call a physician immediately.

**5. Fire Data**

Flammability: Non-Flammable

Flash Point: Not Applicable

Auto Ignition: Not Applicable

Flammable Limits: Not Applicable

Extinguishing Media: Use approved Class D extinguishers or smother with dry sand, dry ground limestone or dry clay. Do not use water. Do not use carbon dioxide extinguisher. Smother burning alloy.

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Pyrophoric material. Wear fire-fighting glasses when fighting fires, alloy produces a very bright white flame when burning.

Fire/Explosion Hazards: May catch fire if exposed to dry air where static charges could be present. Reacts with water to liberate flammable and/or explosive gas. Emits toxic fumes under fire conditions.

## **6. Accidental Release**

Spill Or Leak Procedures: Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water.

## **7. Handling And Storage**

Storage Temperatures: Store at ambient temperature.

Shelf Life: Unlimited in tightly sealed container

Special Sensitivity: Magnesium alloy powder will react with water to produce hydrogen gas and heat. The application of water to molten or burning magnesium aluminum alloy will act as an accelerant, generate hydrogen gas and may cause an explosion.

Handling/Storage Precautions: If any operation involving this product may result in a suspension of alloy powder or dust, precautions must be taken to avoid such suspensions. Care in handling should be used to avoid dust suspensions. No smoking, open flames, or sparks shall be permitted in areas where magnesium aluminum alloys are present. Automatic sprinklers are not recommended in areas where magnesium alloy powder is handled or used. Avoid breathing dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Store in a dry place away from direct sunlight, heat and incompatible materials. Reseal containers immediately after use. Store away from food and beverages.

## **8. Exposure Controls/Personal Protection**

Eye Protection: Safety glasses or goggles.

Skin Protection: PVC gloves with impervious boots, apron or coveralls. Wash hands and face before eating, drinking or using tobacco.

Respirator: Work ambient concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved dust respirator must be worn.

Ventilation: Use local ventilation if dusting is a problem, to maintain air levels below the recommended exposure limit.

Additional Measures: Emergency showers and eye wash stations should be available. Educate and train employees in the safe handling of hazardous chemicals.

## **9. Physical And Chemical Properties**

Physical Form: Powder

Color: Silver to Gray

Odor: Odorless

Molecular Weight: N/A

Boiling Point: N/A

Melting/Freezing Point: A 50/50 alloy melts around 443°C

Solubility In Water: Insoluble  
Specific Gravity: 1.8 as 50/50 alloy

## 10. Stability And Reactivity

Stability: Stable  
Hazardous Polymerization: Will not occur.  
Incompatibilities: Acids, acid chlorides, strong oxidizing agents. Reacts violently with halogens, chlorinated solvents. Air sensitive. Moisture sensitive.  
Instable Conditions: Excessive temperatures (see incompatibilities).  
Decomposition Temperature: Not established.  
Decomposition Products: Not established.

## 11. Toxicological Information

RTECS Number: Magnesium: OM2100000 Aluminum: BD0330000  
Routes of Exposure: Eye contact. Ingestion. Inhalation. Skin contact.  
Toxicity Data: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.  
Chronic Toxic Effects: This product has no known chronic effects. Repeated or prolonged exposure to this compound is not known to aggravate medical conditions.  
Acute Toxic Effects: Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

## 12. Ecological Information

Ecotoxicity: Not available at this time.

## 13. Disposal Considerations

Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental regulations.

## 14. Transportation Information

Proper Shipping Name: Magnesium Aluminum Alloy Powder  
UN Number: 1418  
Class: 4.3  
P.G.: II  
Label Code: 4.3(4.2)

## 15. Regulatory Information

OSHA Status: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.  
TSCA Chemical Inventory: This compound is on the EPA Toxic Substance Control Act (TSCA) Inventory List

California Proposition 65: To the best of our knowledge, this product contains no levels of listed substances which the state of California has found to cause cancer, birth defects, or other reproductive effects.

SARA 313 Title III:

Section 320 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: None

Section 313 Toxic Chemicals: None

## **16. Other Information**

Prepared By: Daniel Handerson

Date: March 25, 2020

Reason For Issue: Emergency Contact Update

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Heeger Materials Inc