ALUMINUM METAL (WIRE, FOIL, SHOT)

1. Product Identification

   Synonyms: Aluminum wire; Aluminum foil; Aluminum shot; Aluminum uncrated nonpyrophoric
   CAS No.: 7429-90-5
   Molecular Weight: 26.98
   Chemical Formula: Al
   Product Codes: 0449, 0456

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Metal</td>
<td>7429-90-5</td>
<td>95 - 100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. Hazards Identification

   Emergency Overview

   As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

   SAF-T-DATA™ Ratings (Provided here for your convenience)

   Health Rating: 0 - None
   Flammability Rating: 0 - None
   Reactivity Rating: 1 - Slight
   Contact Rating: 0 - None
   Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES
   Storage Color Code: Green (General Storage)

   Potential Health Effects

   Inhalation:
   Not expected to be a health hazard.
   Ingestion:
   Not expected to be a health hazard.
   Skin Contact:
   No adverse effects expected.
   Eye Contact:
   No adverse effects expected.
   Chronic Exposure:
   No adverse effects expected.
   Aggravation of Pre-existing Conditions:
   No adverse health effects expected.

4. First Aid Measures

   Inhalation:
   Not expected to require first aid measures.
Ingestion:
Not expected to require first aid measures.

Skin Contact:
Not expected to require first aid measures.

Eye Contact:
Not expected to require first aid measures.

5. Fire Fighting Measures

Fire:
Not considered to be a fire hazard.

Explosion:
Not considered to be an explosion hazard.

Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire.

Special Information:
Use protective clothing and breathing equipment appropriate for the surrounding fire.

6. Accidental Release Measures

Sweep, scoop or pick up spilled material. Package for reclamation or recovery. Package unreclaimable material for disposal in an approved waste disposal facility.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

- OSHA Permissible Exposure Limit (PEL):
  15 mg/m3 (TWA) total dust and 5 mg/m3 (TWA) respirable fraction for Aluminum metal as Al.

- ACGIH Threshold Limit Value (TLV):
  1 mg/m3 respirable fraction (TWA), Aluminum metal and Insoluble compounds, A4.

Ventilation System:
In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Personal Respirators (NIOSH Approved):
Not expected to require personal respirator usage.

Skin Protection:
Wear protective gloves and clean body-covering clothing.

Eye Protection:
Safety glasses.

9. Physical and Chemical Properties

Appearance:
Bright, silver-white metal.

Odor:
Odorless.

Solvability:
Insoluble in water.

Density:
2.70

pH:
No information found.

% Volatiles by volume @ 21C (70F):
0

Boiling Point:
2327C (4221F)

Melting Point:
660C (1220F)

Vapor Density (Air=1):
No information found.

Vapor Pressure (mm Hg):
1 @ 1284C (2343F)

Evaporation Rate (BuAc=1):
No information found.
10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:
Toxic metal fumes may form when heated to decomposition.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Mercury, halocarbons, halogens, water (with bulk aluminum powder) strong oxidizing agents, some acids, bases and many other materials.

Conditions to Avoid:
Incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known</th>
<th>Anticipated</th>
<th>IARC Category</th>
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<td>No</td>
<td>No</td>
<td>None</td>
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12. Ecological Information

Environmental Fate:
No information found.

Environmental Toxicity:
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

<table>
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<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
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<th>SARA 313</th>
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<tr>
<th>Ingredient</th>
<th>CERCLA</th>
<th>261.33</th>
<th>8(d)</th>
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Chemical Weapons Convention: No

TSCA 12(b): No

CDTA: No

SARA 311/312: Acute: No  Chronic: No  Fire: No  Pressure: No

Reactivity: No  (Pure / Solid)

Australian Hazchem Code: None allocated.
16. Other Information

NFPA Ratings:
- Health: 0
- Flammability: 0
- Reactivity: 0

Label Hazard Warning:
As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:
None.

Label First Aid:
Not applicable.

Product Use:
Laboratory Reagent.

Revision Information:
MSDS Section(s) changed since last revision of document include: 8.

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