## 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Trade Name:</th>
<th>Gold zinc alloy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Formula:</td>
<td>Au/Zn</td>
</tr>
<tr>
<td>Recommended Use:</td>
<td>Scientific research and development</td>
</tr>
<tr>
<td>Manufacturer/Supplier:</td>
<td>LTS Research Laboratories, Inc.</td>
</tr>
<tr>
<td>Street:</td>
<td>37 Ramland Road</td>
</tr>
<tr>
<td>City:</td>
<td>Orangeburg</td>
</tr>
<tr>
<td>State:</td>
<td>New York</td>
</tr>
<tr>
<td>Zip Code:</td>
<td>10962</td>
</tr>
<tr>
<td>Country:</td>
<td>USA</td>
</tr>
<tr>
<td>Tel #:</td>
<td>845-587-2436 / 845-lts-chem</td>
</tr>
</tbody>
</table>

### 24-Hour Emergency Contact:
- 800-424-9300 (US & Canada)
- +1-703-527-3887 (International)

## 2. Hazards Identification

<table>
<thead>
<tr>
<th>Signal Word:</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Statements:</td>
<td>None</td>
</tr>
<tr>
<td>Precautionary Statements:</td>
<td>None</td>
</tr>
</tbody>
</table>

### HMIS Health Ratings (0-4):
- Health: 0
- Flammability: 1
- Physical: 0

## 3. Composition

<table>
<thead>
<tr>
<th>Chemical Family:</th>
<th>Metal alloy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Names:</td>
<td>None</td>
</tr>
</tbody>
</table>

### Gold (Au):
- Percentage: 0-100 wt%
- CAS #: 7440-57-5
- EC #: 231-165-9

### Zinc (Zn):
- Percentage: 0-100 wt%
- CAS #: 7440-66-6
- EC #: 231-175-3

## 4. First Aid Procedures

### General Treatment:
Seek medical attention if symptoms persist.

### Special Treatment:
None

### Important Symptoms:
None

### Inhalation:
Remove victim to fresh air. Supply oxygen if breathing is difficult.

### Ingestion:
Seek Medical Attention.

### Skin:
Wash affected area with mild soap and water. Remove any contaminated clothing.

### Eyes:
Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
5. Firefighting Measures

Flammability: Non-flammable
Extinguishing Media: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Spec. Fire Fighting Procedure: Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions: Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions: Wash thoroughly after handling.
Storage Conditions: Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation: Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits: 2 mg/m³ as Sn, long term value
Threshold Limit Value: 2 mg/m³ as Sn, long term value

Special Equipment: None
Respiratory Protection: Dust respirator
Protective Gloves: rubber gloves
Eye Protection: Safety glasses or goggles
Body Protection: Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color: gold-colored
Form: Granules, Pellets, Sputtering target, Custom parts
Odor: Odorless
Water Solubility: Insoluble
Boiling Point: N/A
Melting Point: 420 - 1064 °C
Flash Point: N/A
Autoignition Temperature: N/A
Density: N/A
Molecular weight: N/A
10. Reactivity

**Stability:** Stable under recommended storage conditions
**Reacts With:** Ammonia, Halogens, Hydrogen peroxide, Oxidizing agents
**Incompatible Conditions:** None
**Hazardous Decomposition Products:** Metal oxide fume

11. Toxicological Information

**Potential Health Effects:**
- **Eyes:** May cause irritation
- **Skin:** May cause irritation
- **Ingestion:** May cause irritation
- **Inhalation:** May cause irritation
- **Chronic:** Gold compounds may cause irritation to the eyes and respiratory tract. Aplastic anemia may result from damage to the blood forming organs. Gold has caused tumors and reproductive effects in laboratory animals via implant, intraperitoneal and subcutaneous routes. Zinc containing fumes may cause metal fume fever. Effects include dry throat, metallic taste, chest pain, dyspnea, rales, and dry cough. Several hours later, chills may occur with lassitude, malaise, fatigue, headache, back pain, Muscle cramps, blurred vision, nausea, fever, perspiration, vomiting and leukocytosis.

**Signs & Symptoms:** N/A
**Aggravated Medical Conditions:** N/A
**Median Lethal Dose:** N/A
**Carcinogen:** N/A

12. Ecological Information

**Aquatic Toxicity:** Low
**Persistent Bioaccumulation Toxicity:** No
**Very Persistent, Very Bioaccumulative:** No
**Notes:** N/A

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

**Hazardous:** Not hazardous for transportation.
**Hazard Class:** N/A
**Packing Group:** N/A
**UN Number:** N/A
**Proper Shipping Name:** N/A

15. Regulatory Information

**Sec 302 Extremely Hazardous:** No
**Sec 304 Reportable Quantities:** N/A
**Sec 313 Toxic Chemicals:** Yes
16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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