MATERIAL SAFETY DATA SHEET

Section 1- PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>COMPOSITION</th>
<th>PRODUCT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ga</td>
<td>Gallium</td>
</tr>
</tbody>
</table>

Section 2- HAZARDOUS INGREDIENTS

Note: Products under normal conditions do not represent an inhalation, ingestion or contact health hazard.

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENT</th>
<th>CAS NUMBER</th>
<th>WT%</th>
<th>EXPOSURE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>OSHA PEL (Mg/M3)</td>
</tr>
<tr>
<td>Gallium</td>
<td>7440-55-3</td>
<td>69.72</td>
<td>NE</td>
</tr>
</tbody>
</table>

Section 3- PHYSICAL DATA

<table>
<thead>
<tr>
<th>MATERIAL IS (AT NORMAL CONDITIONS)</th>
<th>APPERANCE AND ODOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Liquid</td>
<td>Grayish black pieces, metallic taste, Odorless.</td>
</tr>
<tr>
<td>□ Solid</td>
<td></td>
</tr>
<tr>
<td>□ Gas</td>
<td></td>
</tr>
<tr>
<td>□ Other</td>
<td></td>
</tr>
<tr>
<td>MELTING POINT (BASE METAL)</td>
<td>SPECIFIC GRAVITY</td>
</tr>
<tr>
<td>29.7° C</td>
<td>5.90gm/cc</td>
</tr>
</tbody>
</table>

Section 4- FIRE AND EXPLOSION

<table>
<thead>
<tr>
<th>Flash Point (Method Used)</th>
<th>Flammable Limits</th>
<th>LEL</th>
<th>UEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

EXTINGUISHING MEDIA

N/A. Use suitable extinguishing media for surrounding materials and type of fire.

SPECIAL FIRED FIGHTING PROCEDURES

Firefighter must wear a self-contained breathing apparatus and full protective clothing. Isolate runoff.

UNUSUAL FIRE AND EXPLOSION HAZARDS

When heated to decomposition gallium metal may emit toxic fumes. Potentially explosive reaction with hydrogen peroxide. May have violent reaction with halogens. May react with alkalies to evolve hydrogen. Causes embrittlement of aluminum.

Section 5- REACTIVITY DATA

<table>
<thead>
<tr>
<th>STABILITY</th>
<th>INCOMPATABILITY (MATERIALS TO AVOID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable</td>
<td>Hydrogen Peroxide, Hydrochloric Acid, Halogens and Aluminum</td>
</tr>
</tbody>
</table>

CONDITIONS TO AVOID

None

HAZARDOUS DECOMPOSIITION PRODUCTS

Hydrogen Gas
Section 6- HEALTH HAZARD GUIDE

**MAJOR EXPOSURE HAZARD**

- Inhalation
- Skin
- Skin Absorption
- Eye Contact
- Ingestion

**INHALATION:** May cause irritation of the upper respiratory tract. Chronic: may cause depression of the bone marrow function.

**INGESTION:** May cause anorexia, nausea and vomiting.

**SKIN:** May cause severe irritation. Poison by subcutaneous route. Chronic: may cause dermatitis and depression of the bone marrow function.

**EYES:** May cause severe irritation and redness.

**EMERGENCY & FIRST AID PROCEDURES**

**INHALATION:** Remove from exposed area to fresh air. Restore and/or support breathing as required.

**INGESTION:** Give 1-2 glasses of water and induce vomiting.

**SKIN CONTACT:** Wash affected area with soap and water.

**EYES:** Flush eyes with warm water, lifting upper and lower eyelids for at least fifteen minutes.

Section 7- SPILL OR LEAK PROCEDURES

**SPILL OR LEAK PROCEDURES**

*Wear a self contained breathing apparatus and full protective clothing. Isolate spill and provide ventilation. Vacuum up spill and place in a container for proper disposal.*

**WASTE DISPOSAL METHODS**

Dispose of in accordance with applicable federal, state and local regulations.

Section 8- SPECIAL PROTECTION

**RESPIRATORY**

*N O I S H approved dust-mist respirator.*

**VENTILATION**

- **Local exhaust:**
  - To Maintain concentration at low exposure levels.

- **Mechanical Exhaust:**
  - Recommended.

**EYE PROTECTION & PROTECTIVE CLOTHING**

*Safety glasses, rubber gloves and protective gear suitable to prevent contamination.*

Section 9- SPECIAL PRECAUTIONS

*Implement engineering and work practices to reduce and maintain concentration to low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash hands and face thoroughly after handling and before eating or smoking. Do not blow dust off clothes or skin with condensed air.*

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