**MATERIAL SAFETY DATA SHEET**

### Section 1- PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>COMPOSITION</th>
<th>PRODUCT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sm2O3</td>
<td>Samarium Oxide</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>OSHA PEL (Mg/M3)</th>
<th>ACGIH TLV(MG/M3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samarium Oxide</td>
<td>12060-58-1</td>
<td>100%</td>
<td>Not Set</td>
<td>Not Set</td>
</tr>
</tbody>
</table>

### Section 3- PHYSICAL DATA

<table>
<thead>
<tr>
<th>MATERIAL IS (AT NORMAL CONDITIONS)</th>
<th>APPERANCE AND ODOR</th>
<th>SPECIFIC GRAVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid □ Solid □ Gas □ Other</td>
<td>White powder/pieces. Odorless</td>
<td></td>
</tr>
<tr>
<td>MELTING POINT (BASE METAL)</td>
<td>N/A</td>
<td></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>Non-Flammable</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

**EXTINGUISHING MEDIA**

Use dry chemical, CO2

**SPECIAL FIRED FIGHTING PROCEDURES**

Wear self contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

May emit toxic fumes if involved in a fire!

### Section 5- REACTIVITY DATA

<table>
<thead>
<tr>
<th>STABILITY</th>
<th>INCOMPATABILITY (MATERIALS TO AVOID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable</td>
<td>Strong acids and bases</td>
</tr>
</tbody>
</table>

**CONDITIONS TO AVOID**

Heat and incompatible materials

HAZARDOUS DECOMPOSITION PRODUCTS

Sm
Section 6- HEALTH HAZARD GUIDE

MAJOR EXPOSURE HAZARD

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

EFFECTS OF OVEREXPOSURE

INHALATION: A respiratory irritant. Coughing, sneezing, difficulty breathing and pulmonary edema are possible. May irritate mucous membrane of the nose and throat.

DERMAL: Irritation, inflammation and redness possible. May cause dermatitis.

EYE CONTACT: Irritation, inflammation, watering and redness are possible.

EMERGENCY & FIRST AID PROCEDURES

INHALATION: Remove from exposed area to fresh air; give oxygen if breathing is difficult.

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

SKIN CONTACT: Brush material off skin.

EYE CONTACT: Flush eyes with lukewarm water lifting up the upper and lower lids for at least fifteen minutes.

Section 7- SPILL OR LEAK PROCEDURES

SPILL OR LEAK PROCEDURES

Wear self contained breathing apparatus and full protective clothing. Isolate area where spill occurred and insure proper ventilation is available. Vacuum up the spill using a high efficiency unit and place in container for proper disposal. Don’t raise dust.

WASTE DISPOSAL METHODS

Dispose in accordance to federal, state and local regulations.

Section 8- SPECIAL PROTECTION

RESPIRATORY

NIOSH approved dust-mist-fume respirator/

VENTILATION

Local Exhaust: Maintain exposure at TLV. Mechanical recommended. Special handle in a controlled atmosphere.

EYE PROTECTION & PROTECTIVE CLOTHING

Wear Safety glasses for eyes. Wear neoprene gloves on hands. Protective gear to avoid skin and clothing contamination.

Section 9- SPECIAL PRECAUTIONS

WORK/HYGIENIC/MAINTENANCE PRACTICES:

Store in a cool dry area. Keep containers closed. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking.

The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.