# MATERIAL SAFETY DATA SHEET

## GALLIUM OXIDE

**Stock #: NS6130-12-000847**

## 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Gallium Oxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>Research and Development</td>
</tr>
<tr>
<td>Address</td>
<td>Nanoshel LLC</td>
</tr>
<tr>
<td></td>
<td>3422 Old Capitol Suit 1305</td>
</tr>
<tr>
<td></td>
<td>Willmington DE – 19808</td>
</tr>
<tr>
<td></td>
<td>United States</td>
</tr>
</tbody>
</table>

**Emergency:** +1.532.253.9878

## 2. COMPOSITION & INFORMATION ON INGREDIENTS

- **Chemical Characterisation**: \( \text{Ga}_2\text{O}_3 \)
- **Hazardous Ingredients**: Nil

## 3. HAZARD IDENTIFICATION

- **Toxicity**: No Data Available
- **Eye Contact**: Dust may cause irritation

## 4. FIRST AID MEASURES

- **Skin**: Wash skin with soap and copious amounts of water
- **Eyes**: Immediate and prolonged irritation treat with copious amounts of water.
- **Ingestion**: Wash out mouth with water provided person is conscious.

---

![Safety Diamond Diagram]

- **Health**: 1
- **Fire**: 0
- **Reactivity**: 0
- **Personal Protection**: E
Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

5. FIREFIGHTING MEASURES

Extinguishing Data: Water Spray
Unsuitable Extinguishing Data: Carbon Dioxide, Dry Chemical Powder, Polymer Foam

Unusual Firefighting Hazards: Capable of creating a dust explosion
Special Firefighting Procedures: Use normal procedures which include wearing self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear respirator, chemical safety goggles, rubber boots and gloves.

Precautions to the Environment: Sweep up, place in a bag and hold for waste disposal.
Cleanup Procedures: Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling Precautions: Chemical Safety Goggles. Compatible with Chemical-resistant Gloves
Storage: Store in a cool dry place.
Unusable Packaging Materials: Wash thoroughly after handling. Irritating dust, Keep tightly closed

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Controls
Personal Protective Equipment
Respiratory: Self-contained breathing apparatus
Hand: Chemical-resistant Gloves
Eye: Avoid contact with eyes
Skin: Wash thoroughly after handling
9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
- Form: Powder
- Colour: White Crystalline
- Odour: No Odour

**Safety Related Information**
- Flash Point: N/A
- Boiling Point: N/A
- Melting Point: 1900°C
- pH: N/A

10. STABILITY AND REACTIVITY

- Stability: Completely Stable
- Reactivity: Non Reactive/ Non Soluble

11. TOXICOLOGICAL INFORMATION

**Possible Health Effects**
- Skin: No effect
- Eyes: Irritation
- Inhalation: No Chocking Hazard
- Toxicity: Non-Toxic

12. ECOLOGICAL IMPACT

- Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.
- No Negative Ecological Impact, Data not Available

13. WASTE DISPOSAL

- Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator, equipped with an afterburner and scrubber

14. TRANSPORT INFORMATION (UN ORNEK OLARAK VERİLMİŞTİR)

- HS Code: 28259090
- CAS: 12024-21-4
- Proper Shipping Name: Gallium Oxide
- Air Transport (ICAO & IATA): Specility Chemicals
- Class: Non Hazardous
- Packing group: Normal Packing
- Transport information: Not regulated for IATA (AIR)
15. OTHER REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Gallium Oxide

Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada)

DSCL (EEC):
  R36- Irritating to eyes
  S2- Keep out of the reach of children
  S46- If swallowed, seek medical advice immediately & show container or label

HMIS (U.S.A.):
  Health Hazard: 1
  Fire Hazard: 0
  Reactivity: 0
  Personal Protection: E

National Fire Protection Association (U.S.A.):
  Health: 1
  Flammability: 0
  Reactivity: 0
  Specific hazard:

Protective Equipment:
  Gloves.
  Lab coat.
  Dust respirator. Be sure to use an approved/certified respirator or equivalent.
  Splash goggles.

16. OTHER INFORMATION

References: Not available
Other Special Considerations: Not available