# MATERIAL SAFETY DATA SHEET

## 1 Product and Company Identification

**Product Name:** Mercury Trap  
**Company Name:** Metronics Inc  
**Emergency Contact Number:** 1-877-737-1887 or 1-360-697-9199

## 2 Composition

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Wt%</th>
<th>ACGIH TLB-TWA</th>
<th>OSHA PEL-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon oxide (synthetic)</td>
<td>7631-86-9</td>
<td>&lt; 60</td>
<td>10 mg/m³ Inhalable, 3 mg/m³ Respirable</td>
<td>15 mg/m³ Total dust, 5 mg/m³ Respirable fraction</td>
</tr>
<tr>
<td>Aluminum oxide (non-fibrous)</td>
<td>1344-28-1</td>
<td>&lt; 50</td>
<td>10 mg/m³</td>
<td>15 mg/m³ Total dust, 5 mg/m³ Respirable dust</td>
</tr>
<tr>
<td>Sodium oxide</td>
<td>1313-59-3</td>
<td>&lt; 10</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Potassium oxide</td>
<td>12136-45-7</td>
<td>&lt; 5</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>1305-78-8</td>
<td>&lt; 2</td>
<td>2 mg/m³</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>&lt; 2</td>
<td>5 mg/m³ as Fe dust and fume</td>
<td>10 mg/m³ as Fe dust and fume</td>
</tr>
<tr>
<td>Magnesium oxide</td>
<td>1309-48-4</td>
<td>&lt; 2</td>
<td>10 mg/m³ Fume</td>
<td>15 mg/m³ Fume, total particulate</td>
</tr>
</tbody>
</table>

**Abbreviations:**  
- **N/E** - None established  
- **CAS** - Chemical Abstracts Service  
- **ACGIH** - American Conference of Governmental Industrial Hygienists  
- **TLV** - Threshold Limit Value  
- **OSHA** - Occupational Safety and Health Administration - USA  
- **TWA** - Time Weighted Average  
- **PEL** - Permissible Exposure Limit  
- **STEL** - Short-Term Exposure Limit
Hazard Identification

Emergency Overview
This product is in a sealed container. Exposure can only take place if the integrity of the container is compromised. In case the container is opened, the contained product can cause irritation to the eyes, skin, or upper respiratory system.

Potential Health Effects
Primary Routes of Exposure: The product is in a sealed container. As long as the container is not opened, exposure should not take place.

Skin Contact: Exposure to Copper may cause allergic skin reactions.
Eye Contact: Dust and/or product may cause eye discomfort and/or irritation seen as tearing and reddening.
Ingestion: This product is considered to have a low order of oral toxicity.
Inhalation: Inhalation of product and/or dust may cause irritation of the respiratory system.
Target Organ: If the sealed container is opened, prolonged or repeated exposure may cause lung injury.

Carcinogenicity Classification
International Agency for Research on Cancer (LARC)
- Silicon oxide (synthetic) - Not classifiable as human carcinogen (Group 3)
- Iron oxide - Not classifiable as human carcinogen (Group 3).
U.S. National Toxicology Program (NTP)
- Not Regulated
U.S. Occupational Safety and Health Administration (OSHA)
- Neither the product nor the component(s) are classified or regulated.

First Aid Measures
Skin Contact: Wash affected area with soap and water. If irritation develops, obtain medical attention.
Eye Contact: Flush with water for at least 15 minutes. If irritation occurs, obtain medical attention.
Ingestion: Do not induce vomiting. Obtain medical attention.
Inhalation: Remove affected person to fresh air. If respiratory problems develop, obtain medical attention.
Notes to Physician: Hydrocarbons and other materials that contact the product during normal use can be retained on the product. The retained materials may be hazardous. Identify the retained material and treat accordingly.

Fire Fighting Measures
Flash Point: Unused material will not burn.
Extinguishing Media: Use media appropriate for surrounding fire.
Fire and Explosion Hazards: Used material may contain materials of a hazardous nature. The user of this product must identify the hazards of the retained material and inform the fire fighters of these hazards.
6 Accidental Release Measures

Large Spill: Isolate the affected areas. Confining entry into the affected area to those persons properly protected. Special attention should be given to eye, skin and respiratory protection because recovery of dry product is expected to generate dust. Sweep, shovel, or vacuum spilled product into appropriate containers. (Do not use a vacuum if material has contacted a hydrocarbon material.)

Small Spill: Sweep or vacuum spilled product into appropriate container. (Do not use a vacuum if material has contacted a hydrocarbon.) Product should be disposed in accordance with all applicable government regulations. See section 13 of MSDS, Disposal Information.

7 Handling and Storage

The product is in sealed containers. In the event the seal on the container is breached, store the product in tightly closed, properly labeled containers. Store out of direct sunlight. Store in dry area.

8 Exposure Controls and Personal Protection

Respiratory Protection: Product is in a sealed container. As long as the seal on the container is not breached, respiratory protection is not needed. If the container seal is breached and natural ventilation is inadequate, use mechanical ventilation, other engineering controls, or a toxic dust respirator (in USA - NIOSH/MSHA approved) to prevent inhalation of product dust.

Skin Protection: Use gloves to avoid prolonged or repeated skin contact.

Eye Protection: Safety glasses or goggles as necessary to prevent eye contact.

9 Physical and Chemical Properties

These data do not represent technical or sales specifications.

Appearance: Material is in a sealed container
Odor: None
pH: Not applicable
% Volatile: Not applicable
Pour Point: Not applicable
Viscosity: Not applicable
Vapor Density: Not applicable
Specific Gravity: Not applicable
Apparent Bulk Density: Not available
Solubility in Water: Negligible
Boiling Point: Not applicable
Freezing Point: Not applicable
Melting Point: Not applicable
Vapor Pressure: Not applicable
**10 Stability**

**Stability:** Stable.

**Conditions to Avoid:** The addition of moisture (water) without flooding can cause rise in temperature from heat of adsorption. Contact with skin might result in burns.

**Hazardous Decomposition Products:** Hydrocarbons and other materials that contact the product during normal use can be retained on the product. It is reasonable to expect that decomposition products will come from these retained materials of use.

**Hazardous Polymerization:** Will not occur.

**Incompatible Materials:** Sudden contact with high concentrations of chemicals having high heats of adsorption such as olefins, HC1, etc.

**11 Toxicological Information**

**Acute Oral Toxicity:** An oral LD$_{50}$ is not available for this product.

**Acute Dermal Toxicity:** A dermal LD$_{50}$ is not available for this product.

**Acute Inhalation Toxicity:** An inhalation LC$_{50}$ is not available for this product.

**Irritation:** No data for this product.

**Additional Toxicological Information:**

Aluminum oxide: Inhalation of finely divided particles may cause lung damage. Intrapleural TD$_{LO}$: 90 mg/kg (rat). Implant TD$_{LO}$: 200 mg/kg (rat). TD$_{LO}$ is Toxic Dose Low.

Silicon oxide: Exposure can cause lung disease called silicosis, with cough and shortness of breath.

**12 Ecological Information**

No data is available for the product.

**13 Disposal Information**

Dispose of the product in accordance with all applicable government regulations. This product (in its fresh unused state) is not listed by generic name or trademark name in the U.S. EPA's Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Regulations and does not possess any of the four identifying characteristics of hazardous waste (ignitability, corrosivity, reactivity, or toxicity).

**14 Transportation Information**

**U.S. Department of Transportation Shipping Name:** Not regulated.

**International Maritime Organization (IMO):** Not regulated.
United States

**TSCA (Toxic Substances Control Act):**
All the ingredients of this mixture are listed on the TSCA Chemical Substance Inventory.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) Reportable Quantity:**
The following component(s) of this product is/are subject to release reporting under 40 CFR 302 when release exceeds the Reportable Quantity (RQ):
- Silver (and Silver Compounds) - RQ is 1000 lbs.

**SARA (Superfund Amendments and Reauthorization Act of 1986) Title III:**

- **Section 302 (Extremely Hazardous Substances):**
The following component(s) of this product is/are subject to the emergency planning provisions of 40 CFR 355 when there are amounts equal or greater than the Threshold Planning Quantity (TPQ):
  —None—

- **Section 313 (Toxic Chemicals):**
The following component(s) have been specified as Toxic Chemicals under SARA Section 313 and may be subject to the Toxic Release Inventory (TRI) reporting requirements under 40 CFR 372:
  Silver Compounds

European Union (EU)

**European Inventory of Existing Commercial Chemical Substances:**
All components of this preparation are included in EINECS/ELINCS.

**Council of European Communities Directive on Classification, Packaging and Labelling of Dangerous Substances/Preparation (67/548/EEC & 88/379/EEC):**

- R43 May cause sensitization by skin contact.
- S45 In case of accident or if you feel unwell, seek medical advice immediately.
- S53 Avoid exposure - obtain special instruction before use.

Canada

**Canadian Hazard Products Act:**
This product is not classified as a controlled product under regulations pursuant to the federal Hazardous Product Act (e.g. WHMIS).

Other Information

Revision 4

Summary of Changes: Section 2
I.D./Form: MS0014
Supersedes: November 2005

Revision 5

Summary of Changes: Section 1
I.D./Form: MS0014
Supersedes: April 2008

HMIS™ - Hazardous Materials Identification System

<table>
<thead>
<tr>
<th>HMIS™ Ratings</th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

0 - minimal hazard
1 - slight hazard
2 - moderate hazard
3 - serious hazard
4 - severe hazard