## 1. IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>MERUCRIC IODIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms:</td>
<td>Mercury (II) iodide; Mercuric iodide red</td>
</tr>
<tr>
<td>Formula and Formula Weight:</td>
<td>Hgl2 454.40</td>
</tr>
<tr>
<td>Integra numbers beginning with:</td>
<td>M537.10</td>
</tr>
<tr>
<td>Recommended Use:</td>
<td>Commercial/industrial use</td>
</tr>
<tr>
<td>Restrictions on Use:</td>
<td>No information available</td>
</tr>
</tbody>
</table>

INTEGRA Chemical Company  
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)  
1216 6th Ave N  
Kent WA 98032  
Phone: 253-479-7000

## 2. HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>OSHA Classification:</th>
<th>Hazard Category:</th>
<th>Hazard Statement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity - Oral</td>
<td>2</td>
<td>Fatal if swallowed.</td>
</tr>
<tr>
<td>Acute Toxicity - Dermal</td>
<td>1</td>
<td>Fatal in contact with skin.</td>
</tr>
<tr>
<td>Acute Toxicity - Inhalation</td>
<td>2</td>
<td>Fatal if Inhaled.</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (repeated exposure)</td>
<td>2</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
</tbody>
</table>

Signal Word: DANGER

**Precautionary Statements**

**Prevention:**
- Do not breathe dust, fume, gas, mist, vapors, spray.
- Do not get in eyes, on skin, or on clothing.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves, protective clothing, respiratory protection.

**Response**
- If swallowed: Rinse mouth.
- If on skin: Wash with plenty of water.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- Immediately call a poison center, doctor.
- Take off immediately all contaminated clothing and wash it before reuse.

**Storage**
- Store locked up in a well ventilated place. Keep container tightly closed.

**Disposal**
- Dispose of contents, container in accordance with all governmental regulations.

Hazard Not Otherwise Classified: No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Synonyms</th>
<th>CAS #</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercuric iodide</td>
<td>Mercury (II) iodide; Mercuric iodide red; Mercury diiodide</td>
<td>07774-29-0</td>
<td>100</td>
</tr>
</tbody>
</table>

## 4. FIRST AID MEASURES

**Inhalation:** Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult administer oxygen. Seek medical attention.

**Eye Contact:** Flush eyes with water for at least 15 minutes. Seek immediate medical attention.

**Skin Contact:** Immediately remove contaminated clothing. Flush skin with water for at least 15 minutes. Seek immediate medical attention.

**Ingestion:** Do not induce vomiting. If victim is conscious, rinse mouth, give water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Additional notes:** Symptoms and effects include skin, eye irritation or burns; central nervous system depression; loss of memory, personality and behavior changes, loose teeth, loss of appetite, brain and kidney damage; decreased fertility, fetal damage. May be fatal if swallowed, inhaled, or in contact with skin.

## 5. FIRE-FIGHTING MEASURES
7. HANDLING AND STORAGE

Incompatible Materials: Incompatible with strong oxidizers. Ammonia, bromides, chlorides, copper and lead salts, cyanides, iodoform, hydrogen peroxide.

Storage and Handling: Store locked up in a cool, dry, well-ventilated area or cabinet dedicated to the storage of toxic materials. Isolate away from incompatible materials. Keep containers well closed and protect them from physical damage. Light and air sensitive.

Do not breathe dust, fume, gas, mist, vapors, spray.
Do not get in eyes, on skin, or on clothing.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, respiratory protection.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

OSHA & ACGIH Exposure Limits:
Mercuric iodide
OSHA Ceiling: 0.1 mg/m³ (as Hg)  ACGIH TWA: 0.025 mg/m³ (as Hg)

Engineering Controls: Use general or local exhaust ventilation to meet TLV and PEL requirements.
Respiratory Protection: Respiratory protection required if airborne concentrations exceed PEL or TLV. Use a NIOSH approved respirator with a particulate filter. If vapors are present, use a NIOSH approved chemical cartridge respirator with a mercury vapor/chlorine gas cartridge and a particulate filter.
Skin/Eye Protective Equipment: Safety goggles, protective clothing and gloves appropriate for the risk of exposure. Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Red powder
Odor: Odorless
Odor Threshold: Not available
pH: Not available
Melting/Freezing Point: 259 °C
Initial Boiling Point and Boiling Range: (sublimes) 350 °C
Flash Point: Not available
Evaporation Rate: Not available
Flammability: Not available
Flammable or Explosive Limits (% by volume in air) Upper: Not available Lower: Not available
Vapor Pressure: 100 mm Hg @262°C
Vapor Density: 16.0
Relative Density: 6.36 g/cc
Solubility: Slightly soluble in water
Partition Coefficient: n-octanol/water Not available
Auto-Ignition Temperature: Not available
Decomposition Temperature: Not available
Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: No information available
Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur
Conditions to Avoid: Excessive heat and exposure to light.
Incompatibles: Incompatible with strong oxidizers. Ammonia, bromides, chlorides, copper and lead salts, cyanides, iodoform, hydrogen peroxide.
Decomposition Products: Mercury and iodine fumes.

11. TOXICOLOGICAL INFORMATION

Effects of Over Exposure:
Inhalation: Harmful or fatal if inhaled irritating to the nose and throat and respiratory system. May cause headache, pneumonitis, coughing, difficulty in breathing and chest pains. May be absorbed in harmful amounts through the respiratory system. Symptoms will be similar to those outlined under ingestion.

Skin Contact: Contact with skin may be irritating. Material may be absorbed through the skin in harmful amounts. Poisoning symptoms will be similar to those outlined under ingestion. May be fatal.

Eye Contact: Contact may burn or damage the eyes.

Ingestion: Harmful or fatal if swallowed. Average lethal dose for inorganic mercury salts is approximately 1 gram. May cause burning to the mouth and throat, abdominal pain, vomiting, corrosive ulcerations and bloody diarrhea. May be followed by rapid and weak pulse, shallow breathing, paleness, exhaustion, central nervous system problems, tremors and collapse. Delayed death may occur from renal failure.

Chronic Effects: Chronic exposure through any route can produce central nervous system damage. May cause muscle tremors, personality disorders, memory loss, metallic taste, loose teeth, digestive disorders, loss of appetite, skin rashes, brain damage and kidney damage. Mercury may accumulate in the body building up to toxic levels with exposure over time. Can cause a dermal allergic reaction.

Target Organs: CNS, skin, kidneys

Additional Effects: May aggravate pre-existing respiratory diseases, central nervous system disorders, impaired kidney function, skin conditions, mercury allergies or sensitization.

Reproductive Effects: Related mercury compounds can damage the developing fetus and decrease fertility in both males and females.

Carcinogenicity:

Toxicity Data:

<table>
<thead>
<tr>
<th>Material</th>
<th>LD50 (skin, rat)</th>
<th>LD50 (oral, rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercuric iodide</td>
<td>75 mg/kg</td>
<td>18 mg/kg</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Aquatic Toxicity Data: No information available
Terrestrial Toxicity Data: No information available

<table>
<thead>
<tr>
<th>Material</th>
<th>Persistence and degradability</th>
<th>Bioaccumulative potential</th>
<th>Mobility in soil</th>
<th>Other adverse effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercuric iodide</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

Disposal Procedures: Dispose of material and containers in accordance with all local, state and federal regulations.

14. TRANSPORTATION INFORMATION

This product is a regulated material for domestic ground transportation, per CFR Title 49.

UN Number: UN1638
Proper Shipping Name: Mercury iodide
Packing Group: II
Hazard Class: 6.1
Environmental hazards: Marine pollutant
Special precautions: No information available
Bulk transport: No information available

15. REGULATORY INFORMATION

Mercuric iodide is listed in the TSCA inventory and in SARA 313 (as mercury compounds).

16. OTHER INFORMATION

OSHA SDS #: 25900 rev 101 2.17.2017

NE = Not established, NA = Not applicable or Not available

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***** END OF SDS *****