Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Ammoniated mercury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>SPECTRUM QUALITY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
</tr>
<tr>
<td>Commercial Name(s)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Synonym</td>
<td>Mercuric Ammonium Chloride</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Not available.</td>
</tr>
<tr>
<td>Chemical Family</td>
<td>Salt.</td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>HgNH2Cl</td>
</tr>
</tbody>
</table>

| Supplier               | SPECTRUM QUALITY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248 |

<table>
<thead>
<tr>
<th>Catalog Number(s)</th>
<th>AM168</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS#</td>
<td>10124-48-8</td>
</tr>
<tr>
<td>RTECS</td>
<td>OV7020000</td>
</tr>
<tr>
<td>TSCA</td>
<td>TSCA 8(b) inventory: Ammoniated mercury</td>
</tr>
<tr>
<td>CI#</td>
<td>Not applicable.</td>
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</tbody>
</table>

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Ammoniated mercury</td>
<td>10124-48-8</td>
<td>0.025</td>
<td>0.15</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients

Ammoniated mercury:
ORAL (LD50): Acute: 86 mg/kg [Rat]. 68 mg/kg [Mouse].

Section 3. Hazards Identification

Potential Acute Health Effects
Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of inhalation. Non-corrosive for skin. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects
Extremely hazardous in case of ingestion.
Very hazardous in case of skin contact (sensitizer, permeator), of eye contact (irritant), of inhalation.
CARCINOGENIC EFFECTS: Classified A5 (Not suspected for human.) by ACGIH.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance is toxic to kidneys, the nervous system.
Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a
**Section 4. First Aid Measures**

| Eye Contact | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately. |
|Skin Contact | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately. |
|Serious Skin Contact | Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention. |
|Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
|Serious Inhalation | Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention. |
|Ingestion | If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately. |
|Serious Ingestion | Not available. |

**Section 5. Fire and Explosion Data**

| Flammability of the Product | Non-flammable. |
|Auto-Ignition Temperature | Not applicable. |
|Flash Points | Not applicable. |
|Flammable Limits | Not applicable. |
|Products of Combustion | Not available. |
|Fire Hazards in Presence of Various Substances | Not applicable. |
|Fire Fighting Media and Instructions | Not applicable. |
|Special Remarks on Fire Hazards | When heated to decomposition it emits toxic fumes. |
|Special Remarks on Explosion Hazards | Not available. |

**Section 6. Accidental Release Measures**

| Small Spill | Use appropriate tools to put the spilled solid in a convenient waste disposal container. |
|Large Spill | Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities. |
**Section 7. Handling and Storage**

**Precautions**
Keep locked up. Do not ingest. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, alkalis.

**Storage**
Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls**
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection**
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill**
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits**
TWA: 0.025 CEIL: 0.15 from ACGIH (TLV) [United States] [1995]

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Solid. (Powdered solid.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>252.07 g/mole</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Decomposes.</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>5.4 (Water = 1)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless.</td>
</tr>
<tr>
<td>Taste</td>
<td>Not available.</td>
</tr>
<tr>
<td>Color</td>
<td>White.</td>
</tr>
<tr>
<td>Dispersion Properties</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in cold water.</td>
</tr>
</tbody>
</table>

**Section 10. Stability and Reactivity Data**

**Stability**
The product is stable.

**Instability Temperature**
Not available.

**Conditions of Instability**
Not available.

**Incompatibility with various substances**
Reactive with oxidizing agents, alkalis.

**Corrosivity**
Non-corrosive in presence of glass.
### Section 11. Toxicological Information

**Routes of Entry**
- Dermal contact.
- Eye contact.
- Inhalation.
- Ingestion.

**Toxicity to Animals**
- Acute oral toxicity (LD50): 68 mg/kg [Mouse].

**Chronic Effects on Humans**
- **CARCINOGENIC EFFECTS:**
  - Classified A5 (Not suspected for human.) by ACGIH.
  - Causes damage to the following organs: kidneys, the nervous system.

**Other Toxic Effects on Humans**
- Extremely hazardous in case of ingestion.
- Very hazardous in case of skin contact (irritant, sensitizer, permeator), of inhalation.
- Non-corrosive for skin.

**Special Remarks on Toxicity to Animals**
- Not available.

**Special Remarks on Chronic Effects on Humans**
- Special Remarks: Not available.

**Special Remarks on other Toxic Effects on Humans**
- Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract.

### Section 12. Ecological Information

**Ecototoxicity**
- Not available.

**BOD5 and COD**
- Not available.

**Products of Biodegradation**
- Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation**
- The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation**
- Not available.

### Section 13. Disposal Considerations

**Waste Disposal**
- Not available.

### Section 14. Transport Information

**DOT Classification**
- CLASS 6.1: Poisonous material.

**Identification**
- : Mercury Ammonium Chloride  UNNA: UN1630  PG: II

**Special Provisions for Transport**
- Marine Pollutant

*Continued on Next Page*
Ammoniated mercury

### DOT (Pictograms)

[DOT pictogram]

### Section 15. Other Regulatory Information and Pictograms

#### Federal and State Regulations

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Ammoniated mercury

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ammoniated mercury

Pennsylvania RTK: Ammoniated mercury

Massachusetts RTK: Ammoniated mercury

TSCA 8(b) inventory: Ammoniated mercury

SARA 302/304/311/312 extremely hazardous substances: Ammoniated mercury

CERCLA: Hazardous substances.: Ammoniated mercury

#### California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ammoniated mercury

#### Other Regulations


#### Other Classifications

**WHMIS (Canada)**

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).

CLASS D-2B: Material causing other toxic effects (TOXIC).

**DSCL (EEC)**

R25- Toxic if swallowed.

R38- Irritating to skin.

R41- Risk of serious damage to eyes.

R43- May cause sensitization by skin contact.

#### HMIS (U.S.A.)

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>E</td>
</tr>
</tbody>
</table>

#### National Fire Protection Association (U.S.A.)

Flammability: 0

Reactivity: 0

Specific hazard: Health: 3

### WHMIS (Canada) (Pictograms)

[Danger pictogram]

### DSCL (Europe) (Pictograms)

[Danger pictogram]

### TDG (Canada) (Pictograms)

[Danger pictogram]

### ADR (Europe) (Pictograms)

[Danger pictogram]

Continued on Next Page
Protective Equipment

- Gloves.
- Lab coat.
- Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
- Splash goggles.

Section 16. Other Information

MSDS Code A4050

References

- The Sigma-Aldrich Library of Chemical Safety Data, Edition II.

Other Special Considerations

Not available.

Verified by Sonia Owen.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.