**SAFETY DATA SHEET (SDS)**

**Phenylhydrazine**

### 01. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Identifier:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade Name:</strong></td>
</tr>
<tr>
<td><strong>Chemical Name:</strong></td>
</tr>
<tr>
<td><strong>Catalog Number:</strong></td>
</tr>
<tr>
<td><strong>Part of Kits:</strong></td>
</tr>
<tr>
<td><strong>Use of chemical:</strong></td>
</tr>
</tbody>
</table>

**Identification of Manufacturer:**

<table>
<thead>
<tr>
<th>Manufacturer/Supplier:</th>
<th>Biochemical Diagnostics, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>180 Heartland Blvd., Edgewood, NY 11717</td>
<td></td>
</tr>
<tr>
<td>Phone: (631) 595-9200</td>
<td>Fax: (631) 595-9204</td>
</tr>
<tr>
<td>Emergency telephone number:</td>
<td>(800) 255-3924</td>
</tr>
</tbody>
</table>

### 02. Hazard(s) Identification

**Classification of substance or mixture:**

- Acute toxicity, Inhalation (Category 3)
- Acute toxicity, Dermal (Category 3)
- Skin irritation (Category 2)
- Eye irritation (Category 2A)
- Skin sensitization (Category 1)
- Germ cell mutagenicity (Category 2)
- Carcinogenicity (Category 1B)
- Specific target organ toxicity - repeated exposure (Category 1)
- Acute aquatic toxicity (Category 1)
- Chronic aquatic toxicity (Category 1)

**Label elements:**

- **Hazard pictograms**
  - ![Health hazard](image)
  - ![Toxic](image)
  - ![Environmental](image)

**Signal word:** Danger

**Hazard statements:**

- H311 + H331 Toxic in contact with skin or if inhaled
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**

- P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
- P264 Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
SAFETY DATA SHEET (SDS)

Phenylhydrazine

**Classification system:**
**NFPA ratings (scale 0 - 4):**
- Health = 2
- Fire = 0
- Reactivity = 0

**HMIS-ratings (scale 0 - 4):**
- Health = 2
- Fire = 0
- Reactivity = 0

**03. Composition/information on ingredients**

**Chemical Characterization:** Compound

**CAS No. Description:** 59-88-1

**Formula:** C₆H₉N₂

**04. First aid measures**

**Description of first aid measures:**
- **Inhalation:** Remove to fresh air. Consult a physician.
- **Ingestion:** Rinse mouth with water. Seek medical attention.
- **Skin Contact:** Remove contaminated clothing. Wash immediately with soap and water. Seek medical attention.
- **Eye Contact:** Rinse with thoroughly with plenty of water for at least 15 minutes. Seek medical attention.

**05. Firefighting measures**

**Extinguishing media:** Water spray, dry chemical, alcohol-resistant foam, or carbon dioxide.

**Special Fire Fighting Procedures:** Wear proper protective equipment with Self contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** Emits toxic fumes under fire conditions - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

**06. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Avoid breathing vapors, mist or gas. Keep unprotected persons away. Ensure adequate ventilation.

**Environmental precautions:**
Prevent further leakage if safe to do. Do not allow to enter sewers/surface or ground water.

**Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust) and remove.

**Waste Disposal Method:**
Dispose in accordance with state, local and federal regulations.
07. Handling and storage

Handling:
- **Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
- **Conditions for safe storage, including any incompatibilities:**
  - **Requirements to be met by storerooms and receptacles:** Store in a cool location.
  - **Further information about storage conditions:** Keep receptacle tightly closed. Store in well-ventilated, cool, dry conditions. Keep container sealed and upright to prevent leakage.

08. Exposure controls/ personal protection

**Exposure Controls:**
- **Control parameters:**
  - **Components with limit values that require monitoring at the workplace:**
    - Contains no substances with occupational exposure limit values.

**Personal protective equipment:**
- **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
- **Eye Protection:** Tightly sealed safety glasses or face shield.
- **Skin Protection:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact
- **Protection of Hands:** Protective gloves
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Dispose of gloves after use.
- **Respiratory Protection:** If the exposure limit is exceeded use NIOSH approved and tested full-face respirator that is independent of circulating air.
- **Ventilation:** Keep vapor levels as low as possible, use adequate general or local exhaust.

09. Physical and chemical properties

**Appearance:**
- **Form:** Powder
- **Color:** White Crystalline

**Odor:** Pungent

**pH:** N/A

**Melting Point:** 250 - 254 °C (482 - 489 °F)

**Boiling Point:** N/A

**Flash Point:** N/A

**Ignition temperature:** N/A

**Explosion limits:**
- **Lower:** N/A
- **Upper:** N/A
SAFETY DATA SHEET (SDS)

Phenylhydrazine

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure @ 24°C</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity @ 20°C (68°F)</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammable Limits in air % by volume:</td>
<td></td>
</tr>
<tr>
<td>LEL:</td>
<td>N/A</td>
</tr>
<tr>
<td>UEL:</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in/ Miscibility with Water@20°C</td>
<td>Soluble</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

**Stability:** Stable

**Incompatibility:** May decompose on exposure to moist air or water. Avoid Bases.

**Conditions to Avoid:** Exposure to sunlight.

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition:** Carbon oxides and Hydrogen chloride gas may form under fire conditions. Emits highly toxic fumes of phosgene (COCl₂) when heated to decomposition.

11. Toxicological information

**Acute toxicity:**

LD/LC50 values that are relevant for classification:

- Oral LD50 2,100 mg/kg (mouse)

**Potential health effects:**

- **On the skin:** Toxic in contact with skin. Causes skin irritation.
- **On the eye:** Causes eye irritation.
- **Inhalation:** Toxic if inhaled.
- **Ingestion:** May be harmful if swallowed.

Possible human carcinogen, may cause genetic defects.

12. Ecological information

**Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

13. Disposal considerations

**Waste treatment methods**

**Product:**

Dispose of waste in accordance to applicable national, regional, or local regulations.

**Contaminated packaging:**

Disposal must be made according to official regulations.
**SAFETY DATA SHEET (SDS)**

**Phenylhydrazine**

### 14. Transport Information

<table>
<thead>
<tr>
<th><strong>UN Number:</strong></th>
<th>2811</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name:</strong></td>
<td>Toxic solids, organic, n.o.s. (Phenylhydrazinium chloride)</td>
</tr>
<tr>
<td><strong>Transport hazard class(es):</strong></td>
<td>6.1</td>
</tr>
<tr>
<td><strong>Packing group:</strong></td>
<td>III</td>
</tr>
<tr>
<td><strong>Environmental hazards:</strong></td>
<td>Harmful to aquatic life</td>
</tr>
<tr>
<td><strong>Special precautions</strong></td>
<td>None</td>
</tr>
</tbody>
</table>

### 15. Regulatory Information

**SARA 302 Components:**
The following components are subject to reporting levels established by SARA Title III, Section 302:
- Phenylhydrazinium chloride        CAS-No. 59-88-1       Revision Date 2007-07-01

**SARA 313 Components:**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:**
Acute Health Hazard, Chronic Health Hazard

### 16. Other Information

Revision B, June 2015

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, we make no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, we will not be responsible for damages of any kind resulting from the use of or reliance upon such information. No representations, or warranties, either express or implied of merchantability fitness for a particular purpose or of any other nature made hereunder with respect to the information set forth herein or to the product which the information refers.