# Material Safety Data Sheet (MSDS)

**Revision Number:** 1.0  
**Last updated:** July 9, 2013

## 1. Product and Company Identification

**Product Name:** Propidium iodide, 1.0 mg/mL solution in water  
**Manufacturer/Supplier:** AnaSpec, Inc.  
[www.anaspec.com](http://www.anaspec.com)  
34801 Campus Drive  
Fremont, CA 94555  
Tel: 510-791-9560  
Fax: 510-791-9572  
Email: service@anaspec.com

**Catalog Number:** 83215  
**Unit Size:** 10mL

## 2. Hazards Identification

**Emergency Overview:**  
Warning: Avoid contact and inhalation. To our knowledge the hazards of this material have not been thoroughly investigated. We recommend handling all chemicals with caution. Use proper protective equipment when handling chemicals.

**GHS Hazard Classification:**  
- GHS Physical Hazards: None  
- GHS Health and Environmental Hazards: None  
- GHS Signal Words: Warning

**GHS Hazard Statements:**  
H313-H315-H319-H335 May be harmful if swallowed or in contact with skin.  
H333, May be harmful if inhaled.

**GHS Precautionary Statements:**  
P302+P352+ P304+P340+P305+P332 Material may cause skin irritation. May cause irritation if inhaled or prolonged exposure. Avoid prolonged exposure.

**HMIS Classification**  
- Health hazard: 2  
- Chronic Health Hazard: *  
- Flammability: 0  
- Physical hazards: 0

**NFPA Rating**  
- Health hazard: 2  
- Fire: 0  
- Reactivity Hazard: 0
3. Composition / Information on Ingredients

Ingredients/Components:

- **Chemical Name:** 3,8-diamino-5-[3-(diethylmethyl ammonio)propyl]-6-phenylphen anthridinium diiodide; propidium iodide
- **Molecular Formula:** $C_{27}H_{34}I_2N_4$
- **Molecular Weight:** 668.4
- **CAS –No:** 25535-16-4
- **EC-No:** 247-081-0

4. First Aid Measures

**Inhalation:** Avoid direct inhalation or prolonged exposure. Move to fresh air.

**Ingestion:** May be harmful if ingested. If swallowed, wash out mouth with water provided person is conscious. Call a physician and seek medical advice.

**Skin:** May cause skin irritation. May be harmful if absorbed through skin. In case of contact, immediately wash skin with soap and copious amount of water.

**Eyes:** May cause irritation. In case of contact, immediately flush eyes with copious amounts of water for at 15 minutes. Call a physician and seek medical advice.

5. Fire Fighting Measures

**Extinguishing media:**
- Water spray or fog
- Foam
- Dry chemical powder
- BCF(where regulation permit)
- Carbon dioxide

**Special firefighting procedures:**
- Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course
- Use water delivered as a fine spray to control fire and cool adjacent area
- Cool fire exposed containers with water spray from a protected location
- If safe to do so, remove containers from path of fire
- Equipment should be thoroughly decontaminated after use.

**Unusual fire and explosions hazards:** Data not available

6. Accidental Release Measures

**Spill response**
- Use personal protective equipment. Soak up with inert absorbent material if spilt.

**Containment**
- Soak up with inert absorbent material if spilt.

**PPE**
- Use personal protective equipment
7. Handling and Storage
Keep in properly labeled containers. Always wear recommended personal protective equipment.

Keep containers tightly closed in a dry and well-ventilated place. Containers that are opened must be carefully resealed and kept upright. Store in 2-8°C refrigerator with desiccant away from light.

8. Exposure Controls / Personal Protection
Engineering controls Use personal protective equipment
PPE Use personal protective equipment. Soak up with inert absorbent material if spilt.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Dark (red) solution</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available.</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Good</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH</td>
<td>No data available.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>N/A</td>
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</tbody>
</table>

10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Decomposition</td>
<td>No data available.</td>
</tr>
<tr>
<td>Dangerous Products of Decomposition</td>
<td>No data available.</td>
</tr>
<tr>
<td>Dangerous Reactions</td>
<td>COx, NOx when burned</td>
</tr>
</tbody>
</table>

11. Toxicological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTECS Number</td>
<td>N/A</td>
</tr>
<tr>
<td>Toxicity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Health Hazards</td>
<td>No information available.</td>
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<tr>
<td>Potential Hazards</td>
<td>No information available.</td>
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<tr>
<td>Carcinogenicity:</td>
<td>No information available.</td>
</tr>
<tr>
<td>OSHA Permissible Exposure Limit(PEL) Data</td>
<td>N/A</td>
</tr>
<tr>
<td>ACGIH Threshold Limit Values (TLV)</td>
<td>N/A</td>
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<tr>
<td>Reproductive Toxicity</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

12. Ecological Information
No information available. Inherently biodegradable.

13. Disposal Considerations
Prevent product from entering drains. Dispose of in accordance with local regulation. We recommend incineration of unused product.
14. Transport Information

<table>
<thead>
<tr>
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<th>N/A</th>
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<tbody>
<tr>
<td>UN Number</td>
<td>N/A</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>N/A</td>
</tr>
<tr>
<td>Identification Number</td>
<td>N/A</td>
</tr>
<tr>
<td>Packing Group</td>
<td>N/A</td>
</tr>
<tr>
<td>Proper Shipping Name (DOT/IATA)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

15. Regulatory Information

United States:
California Proposition 65: This product does not contain chemicals listed under Proposition 65.

US TSCA (Toxic Substance Control Act): N/A
US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act): N/A
US SARA Title III (Superfund Amendments and Reauthorization Act): N/A

US Clean Air Act:
Listed under Hazardous Air Pollutants: Not listed
Listed under Class 1 Ozone Depleters: Not listed
Listed under Class 2 Ozone Depleters: Not listed

US Clean Water Act:
Listed under “Hazardous Substances”: Not listed
Listed under “Priority Pollutants”: Not listed
Listed under “Toxic Pollutants”: Not listed

European/International Regulations:
EC EINICS (European Inventory of Existing Commercial Chemical Substances) Number: N/A
WGK (Water Danger / Protection): N/A
Canada – DSL/NDSL: Not listed
Canada – WHMIS Classification: N/A
Canada – Canadian Ingredient Disclosure List: Not listed

16. Other Information

It is not intended for food, drug, household, agricultural or cosmetic use. A technically qualified individual experienced in handling potentially hazardous chemicals must supervise its use. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Users should make independent decisions regarding completeness of the information based on all sources available. AnaSpec shall not be held liable for any damage resulting from handling or from contact with the above product.