1. Identification

**Product Name:** Ink Aid™

**Item #:** IA4000, IA2000

**Synonyms:** Tissue Marking Dye Setting Solution

**Recommended Use:** N/A

**Manufacturer/Supplier:**
Cancer Diagnostics, Inc.
4300 Emperor Blvd. #400
Durham, NC 27703
1-877-846-5393

**In Case of Emergency:**
Chemtrec US 1-800-424-9300
Chemtrec International 703-527-3887

2. Hazards Identification

**OSHA Hazard Classification(s):**
- Skin Irritation - Category 2
- Eye Irritation - Category 2B

**Signal Word:** Warning

**Hazard Statement(s):** Causes skin irritation. Causes eye irritation.

**Pictogram(s):**

**Precautionary Statement(s):** Prevention: Wash body thoroughly after handling. Wear protective gloves.

Response: If on skin: Wash with plenty of water. Specific treatment (see first aid section on this label). If skin irritation or rash occurs: Get medical attention. Take off all contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing If eye irritation persists: Get medical attention.

Storage: N/A

Disposal: N/A

**Descriptions of Hazards not otherwise classified:** N/A

**Percent of mixture with unknown acute toxicity:** N/A

3. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS #</th>
<th>Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
<td>&gt;93</td>
</tr>
<tr>
<td>Glacial Acetic Acid</td>
<td></td>
<td>64-19-7</td>
<td>&lt;6</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>1,2 Propanediol</td>
<td>57-55-6</td>
<td>Trade Secret</td>
</tr>
</tbody>
</table>

4. First Aid Measures

**Eye Contact:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

**Inhalation:** Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

**Ingestion:** Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

**Symptoms:** Irritation eyes, nose, throat; headache, dizziness

**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if you feel unwell.

5. Fire-Fighting Measures
Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water.
Fire Hazards (Chemical): Not flammable.
Special Protective Equipment: Firefighters should use self-contained breathing apparatus and protective clothing.
Precautions for Firefighters: Firefighters should use self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures

Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.
Protective Equipment: See section 8
Environmental Precautions: Prevent release to the environment by using barriers.

7. Handling and Storage

Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product.
Storage: Store in a well-ventilated, cool place. Keep lid tightly closed.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>OSHA PEL TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glacial Acetic Acid</td>
<td>64-19-7</td>
<td>10 ppm, 25 mg/m3</td>
</tr>
</tbody>
</table>

ACGIH Threshold Limit Values (TLVs):

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>ACGIH PEL TLV</th>
<th>ACGIH STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glacial Acetic Acid</td>
<td>64-19-7</td>
<td>10 ppm, 25 mg/m3</td>
<td>15 ppm, 37 mg/m3</td>
</tr>
</tbody>
</table>

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.
Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.
Special PPE Requirements: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section

Appearance: Pale Yellow, Liquid
Molecular Weight: N/A
Molecular Formula: N/A
pH: 5-6
Boiling Point and Boiling Range: N/A
Melting Point/Freezing Point: N/A
Flash Point: N/A
Specific Gravity/Relative Density: N/A
Odor: Pungent, like vinegar
Odor Threshold: N/A
Color: Pale Yellow
Flammability (solid/gas): N/A
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
### 10. Stability and Reactivity

**Reactivity:** Not reactive

**Chemical Stability:** Stable

**Conditions of Stability/Instability:** Stable under normal conditions of temperature and pressure.

**Stabilizers needed:** None

**Safety issue indicated by appearance change:** N/A

**Other:** N/A

**Hazardous Reactions:** N/A

**Hazardous Polymerization:** Does not occur

**Conditions to avoid:** N/A

**Classes of Incompatible Materials:** Oxidizers, Strong Acids, Strong Bases

**Hazardous Decomposition Products:** Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (i.e. Carbon monoxide) may be released in a fire.

### 11. Toxicological Information

**Likely Routes of Exposure**

- **Eyes:** Irritation. Slightly hazardous in case of eye contact.
- **Skin:** Irritation. Slightly hazardous in case of skin contact.
- **Inhalation:** Dizziness, headache.
- **Ingestion:** Nausea.

**Signs or Symptoms of Exposure:** Nausea.

**Effects from short term exposure (delayed, immediate, chronic):** Repeated or prolonged exposure is not known to aggravate medical conditions.

**Acute Toxicity (Numerical Measures):** Glacial Acetic Acid CAS 64-19-7: LD50 (mammal, skin)=1060mg/kg; LD50 (rabbit, skin)=1060 mg/kg; LC50(inhalation, mouse)=5620 ppm/1H; LC50(inhalation, mouse)=5620 mg/m3/1H

**Carcinogenicity (NTP, IARC, OSHA):** Not listed as a carcinogen.

### 12. Ecological Information

**Ecotoxicity:** Acute Aquatic Effects Data for 100% Glacial Acetic Acid 96 h LC-50 (fathead minnow): > 100mg/L 48 h LC-50 (golden orfe): 410 mg/L 48 h LC-50 (mosquito fish): 251 mg/L 96 h LC-50 (daphnid): > 100 mg/L

**Persistence and degradability:** The product itself and its products of degradation are not toxic.

**Bioaccumulation Potential (octanol-water partition coefficient, BCF):** This material is a strongly acidic aqueous solution, and this property may cause adverse environmental effects. Oxygen Demand Data for 100% Glacial Acetic Acid BOD-5: 340-880 mg/g BOD-20: 900 mg/g COD: 1,030 mg/g

**Mobility in the soil:** N/A

**Adverse Environmental Effects:** N/A

### 13. Disposal Considerations

**Recommended Disposal Containers:** Check with your local waste authorities*

**Recommended Disposal Methods:** Do not dispose of in drains, check with your local waste authorities.*

**Physical/Chemical Properties affecting Disposal:** See section 2 and section 9 applicable information.*

**Special Precautions for Landfill and Incineration Activities:** Check with your local waste authorities.*

**Waste Stream:** Consult your local or regional authorities.*
14. Transport Information

UN Number: Not regulated.
UN Proper Shipping Name:
Transport Hazard Class(es):
Packing Group Number:
Environmental Hazards (IMDG code):
   Marine Pollutant:
Transport in Bulk (IBC Code):
Special Transport Precautions:

15. Regulatory Information

OSHA: N/A
DOT: N/A
EPA: N/A
CPSC: N/A

16. Other Information

Revision Date: 07/28/2015

NFPA

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
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<tr>
<td>Fire Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Specific Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

Hazardous Material Information System (HMIS)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>0</td>
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</tbody>
</table>

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