


## SAFETY DATA SHEET

### 1. IDENTIFICATION

- |                            |   |
|----------------------------|---|
| 1.1. Product Name          | Stemgent® AP Staining Kit II Solution B   |
| 1.2. Catalog Number        | 09-0065   |
| 1.3. Uses and restrictions | For research use only. Not for use in diagnostic or therapeutic applications  |
| 1.4. Manufacturer/Supplier | Stemgent, Inc.<br>4 Hartwell Place<br>Lexington, MA 02421 USA<br>(617) 245-0000   |
| 1.5. In Case of Emergency  | <ul style="list-style-type: none"> <li>• For medical emergencies, contact your local emergency center.</li> <li>• For transportation emergencies, contact your local transportation authorities.</li> <li>• For other non-medical or non-environmental emergencies please call (617) 245-0030, 8:00 am-4:00 pm EST, Monday – Friday.</li> </ul> |

### 2. HAZARDS IDENTIFICATION

- |                                 |  |
|---------------------------------|--|
| 2.1. Classification             | GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) <ul style="list-style-type: none"> <li>• Skin Irritant, H315</li> <li>• Eye Irritant 2A, H314</li> </ul>  |
| 2.2. Signal Word                | Warning  |
| 2.3. Symbol                     |    |
| 2.4. Hazard Statement(s)        | <ul style="list-style-type: none"> <li>• H319 Causes serious eye irritation.</li> <li>• H315 Causes skin irritation.</li> </ul>  |
| 2.5. Precautionary Statement(s) | <ul style="list-style-type: none"> <li>• P264 Wash skin thoroughly after handling.</li> <li>• P270 Do not eat, drink or smoke when using this product.</li> <li>• P280 Wear protective gloves/protective clothing.</li> <li>• P302+P352 IF ON SKIN: Wash with plenty of soap and water.</li> <li>• P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>• P332+P313 If skin irritation occurs: Get medical advice/attention.</li> <li>• P337+P313 If eye irritation persists: Get medical advice/attention</li> <li>• P362 Take off contaminated clothing</li> <li>• P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li> <li>• P310 Immediately call a POISON CENTER or doctor/physician.</li> <li>• P321 Specific treatment (see supplemental first aid instructions on this label).</li> <li>• P363 Wash contaminated clothing before reuse.</li> </ul> |



**AMERICAS • HUMAN TISSUE**  
9000 Virginia Manor Road, Suite 207  
Beltsville, MD 20705, USA  
Tel: (301) 470-3362  
Email: [info@bioserve.com](mailto:info@bioserve.com)  
[www.bioserve.com](http://www.bioserve.com)



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4 Hartwell Place  
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United Kingdom  
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- P501 Dispose of contents/container to an approved waste disposal plant.
- 2.6. Hazards not otherwise classified (HNOC) or not covered by GHS None.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Name	3.2 Synonyms	3.3 Chemical Formula	3.4 Molecular Weight	CAS Number
2,2'-Oxydiethanol, 2-Hydroxyethylether	Diethylene Glycol	C <sub>4</sub> H <sub>10</sub> O <sub>3</sub>	106.12 g/mol	111-46-6
Hydrogen Chloride	Hydrochloric Acid	HCl	36.46 g/mol	7647-01-0

### HAZARDOUS COMPONENTS WITHIN MIXTURE

Component	CAS-No./EC-No.	Classification	Concentration
Diethylene Glycol	CAS-No: 111-46-6 EC-No: 203-872-2	Acute Tox. 4: H302 STOT RE 2: H373	9-10%
Hydrochloric Acid	CAS-No: 7647-01-0 EC-No: 231-595-7	Met. Corr. 1: H290 Skin Corr. 1B: H314 Eye Dam. 1: H314 STOT SE 3: H335	<1%

### 4. FIRST AID MEASURES

#### 4.1. First Aid Instructions

- General Advice Move out of exposure area. Consult a physician.
- Eyes Check for and remove contact lenses immediately and flush thoroughly with water for at least 15 minutes. Call a physician.
- Skin Immediately flush skin with copious amounts of water. Remove contaminated clothing and shoes and wash before use. Contact a physician.
- Ingestion If swallowed, wash mouth out with water provided person is conscious. Do not induce vomiting. Loosen tight clothing. Contact a physician.
- Inhalation If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, call a physician.
- Puncture Wounds Wash thoroughly with soap and water. Allow wound to bleed freely. Contact a physician.

#### 4.2. Most Important Symptoms/effects, acute and immediate

Described in section 2.



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4.3. Indications of immediate medical attention and special treatment needed  
No data available.

### 5. FIRE FIGHTING MEASURES

5.1. Suitable extinguishing media.  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Specific hazards arising from the chemical  
Carbon oxides, Hydrogen chloride gas

5.3. Special protective equipment and precautions for fire-fighters  
Wear self contained breathing apparatus and full turnout gear for firefighting if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures  
Use personal protective equipment (see section 8). Avoid direct contact with skin or eyes and prevent inhalation of dust and vapours. Ensure adequate ventilation.

6.2. Environmental Precautions  
Do not let product enter drain.

6.3. Methods and materials for containment and clean up  
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Avoid inhalation, contact with eyes, skin, and clothing.
- Avoid prolonged or repeated exposure.
- Keep in well ventilated area
- For other precautions see section 2.5.

7.2. Conditions for safe storage, including any incompatibilities  
Store at 4°C. Keep container tightly closed in a dry and well-ventilated place. Containers which are open must be carefully resealed and kept upright to prevent leakage.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters  
Diethylene glycol, CAS No. 111-46-6  
Diethylene glycol Exposure Limits

- TWA: 10 mg/m<sup>3</sup> – USA. Workplace Environmental Exposure Levels (WEEL)



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Hydrochloric Acid, CAS No. 7647-01-0

- Often used in an aqueous solution
- Upper respiratory tract irritation
- Not classified as a human carcinogen

Hydrochloric Acid Exposure Limits

- Ceiling Limit: 2ppm – USA. ACGIH Threshold Limit Values (TLV) 5ppm; 7mg/m<sup>3</sup> – USA. NIOSH Recommended Exposure Limit 5ppm; 7 mg/m<sup>3</sup> – USA. OSHA – Table Z-1 limits for air contaminants – 1910.1000 (Ceiling Limit is to be determined from breathing-zone air samples)

8.2. Appropriate engineering controls

Safety shower and eye bath. Mechanical exhaust required.

8.3. Protection measures and Personal Protective Equipment

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling.

8.4. Respiratory Protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

8.5. Eye Protection

Chemical safety goggles.

8.6. Skin Protection

Protective gloves and lab coat. Use nitrile rubber gloves with a minimum thickness of 0.11 mm.

### 9. PHYSICAL/CHEMICAL PROPERTIES

9.1. Appearance

Colorless liquid.

9.2. Odor

No data available.

9.3. Odor Threshold

No data available.

9.4. pH

No data available.

9.5. Melting point/freezing point

No data available.

9.6. Initial boiling point and boiling range

No data available.

9.7. Flash point

No data available.

9.8. Evaporation rate

No data available.

9.9. Flammability (solid, gas);

No data available.

9.10. Upper/lower flammability or explosive limits

No data available.

9.11. Vapor pressure

No data available.

9.12. Vapor density

No data available.

9.13. Relative density

No data available.



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9.14. Solubility(ies)	No data available.
9.15. Partition coefficient: n-octanol/water	No data available.
9.16. Auto-ignition temperature	No data available.
9.17. Decomposition temperature	No data available.
9.18. Viscosity	No data available.
9.19. Explosive properties	No data available.
9.20. Oxidizing properties	No data available.

### 10. STABILITY/REACTIVITY

10.1. Reactivity	No data available.
10.2. Chemical Stability	This product is stable.
10.3. Possibility of hazardous reactions	No data available.
10.4. Conditions to Avoid	Not available.
10.5. Incompatible materials	Zinc, Bases, Alkali metals, Strong oxidizing agents, Metals, Amines, Strong acids, permanganates, e.g. potassium permanganate, Fluorine, Hexalithium disilicide
10.6. Hazardous decomposition products	No data available.

### 11. TOXICOLOGICAL INFORMATION

11.1. Toxicological effects	No data available.
<ul style="list-style-type: none"> <li>• Acute toxicity</li> <li>• Skin corrosion/irritation</li> <li>• Serious eye damage/eye irritation</li> <li>• Respiratory or skin sensitization</li> <li>• Germ cell mutagenicity</li> <li>• Carcinogenicity</li> </ul>	<p>No data available.</p> <ul style="list-style-type: none"> <li>• IARC: 3 – Group 3: Not classifiable as to is carcinogenicity to humans (Hydrochloric acid)</li> <li>• ACGIH: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.</li> <li>• NTP: No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen.</li> <li>• OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.</li> </ul>
<ul style="list-style-type: none"> <li>• Reproductive Toxicity</li> <li>• Specific target organ toxicity - single exposure</li> </ul>	<p>No data available.</p> <p>No data available.</p>



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- Specific target organ toxicity - repeated exposure No data available.
- Aspiration hazard No data available.
- 11.2. Symptoms related to the physical, chemical and toxicological characteristics Prolonged or repeated exposure can cause: Nausea, dizziness, kidney injury may occur, confusion, weakness, unconsciousness, convulsions, pulmonary edema. Effects may be delayed.
- 11.3. Effects of Short-Term Exposure No data available.
- 11.4. Effects of Long-Term Exposure No data available.
- 11.5. Numerical measures of toxicity No data available.
- 11.6. Other Information Liver – irregularities – Based on Human evidence

### 12. ECOLOGICAL INFORMATION

- 12.1. Toxicity No data available.
- 12.2. Persistence and degradability No data available.
- 12.3. Bioaccumulative potential No data available.
- 12.4. Mobility in soil No data available.
- 12.5. Results of PBT and vPvB assessment No data available.
- 12.6. Other adverse effects No data available.

### 13. DISPOSAL CONSIDERATIONS

- 13.1. Disposal Method Waste must be disposed of in accordance with federal, state, and local environmental control regulations.
- 13.2. Personal safety Refer to section 8.

### 14. TRANSPORT INFORMATION

This product is considered non hazardous for transport.

### 15. REGULATORY INFORMATION

#### U.S. Federal Regulations

- SARA 313 components This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels.
- SARA 302 components Does not contain any components subject to reporting.
- SARA 311/312 Hazards Acute Health Hazard, Chronic Health Hazard
- Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see CFR 61) Does not contain any components subject to reporting.



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### U.S. State Regulations

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• California Proposition 65</li><li>• Massachusetts Right To Know Components</li><li>• Pennsylvania Right To Know Components</li><li>• New Jersey Right To Know Components</li></ul> | Does not contain any components subject to reporting.<br>Hydrochloric acid, CAS No. 7647-01-0<br><br>Hydrochloric acid, CAS No. 7647-01-0<br>Diethylene glycol, CAS No. 111-46-6<br><br>Hydrochloric acid, CAS No. 7647-01-0<br>Diethylene glycol, CAS No. 111-46-6 |
|--|---|

### WHMIS Hazard Class

Not controlled under WHMIS (Canada).

### 16. OTHER INFORMATION

#### Notice

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Stemgent, Inc. shall not be held liable for any damage resulting from handling or from contact with the product. See Stemgent, Inc. website for terms and conditions of sale.

Preparation Date

March 18, 2016

Version No.

1.3

Prepared by

Quality Control

END OF SAFETY DATA SHEET



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