# Aniline Blue (MSB) Stain

## 1. Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Aniline Blue (MSB) Stain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Special Stain</td>
</tr>
<tr>
<td>Recommended Use</td>
<td>Laboratory Reagent</td>
</tr>
<tr>
<td>Manufacturer/Supplier</td>
<td>Avantik Biogroup</td>
</tr>
<tr>
<td></td>
<td>32 Commerce Street</td>
</tr>
<tr>
<td></td>
<td>Springfield, NJ 07081</td>
</tr>
<tr>
<td></td>
<td>1-888-392-8411</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictions on Use:</td>
</tr>
</tbody>
</table>

## 2. Hazards Identification

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

**Signal Word:** Warning

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

**Pictogram(s):**

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

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>Aniline Blue</td>
<td></td>
<td>28631-66-4</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Glacial Acetic Acid</td>
<td></td>
<td>64-19-7</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.
Aniline Blue (MSB) Stain

5. Fire-Fighting Measures

**Extinguishing Media:** Dry chemical, carbon dioxide, alcohol foam, water.

**Fire Hazards (Chemical):** Not flammable.

**Special Protective Equipment:** Fire fighters should use self-contained breathing apparatus and protective clothing.

**Precautions for Firefighters:** Fire fighters 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.

**Containment and Clean-Up Procedures:** Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

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 place. Keep cool. 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>10ppm</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:** Dark Blue, Liquid

**Molecular Weight:** N/A

**Molecular Formula:** N/A

**pH:** N/A

**Boiling Point and Boiling Range:** N/A

**Melting Point/Freezing Point:** N/A

**Flash Point:** N/A

**Specific Gravity/Relative Density:** N/A

**Odor:** Characteristic of vinegar

**Odor Threshold:** N/A

**Color:** Dark Blue

**Flammability (solid/gas):** N/A

**Vapor Density:** N/A

**Upper/Lower flammability or explosive limits:** N/A

**Vapor Pressure:** N/A
Aniline Blue (MSB) Stain

Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: Soluble in water.
Decomposition Temperature: N/A

10. Stability and Reactivity
Reactivity: N/A
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. May cause permanent damage. Very basic solution.
Skin: Irritation. May cause mild irritation, redness, cracking, drying or permanent damage. Very basic solution.
Inhalation: Dizziness, headache. Irritation to respiratory tract. High concentrations may cause central nervous system depression with weakness, drowsiness, nausea, vomiting, diarrhea, fatigue or loss of consciousness.
Ingestion: Nausea, headache, double vision. May cause unconsciousness.

Signs or Symptoms of Exposure: Nausea, dizziness, headache, diarrhea.
Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.
Acute Toxicity (Numerical Measures): Glacial Acetic Acid: IDLH= 125 mg/m3 =50ppm LD50 (mammal, skin)=1060mg/kg LD50 (rabbit, skin)=1060 mg/kg ihl mus LC50 5620 ppm/1H ihl mus LC50 5620 mg/m3/1H
Carcinogenicity (NTP, IARC, OSHA): Does not contain any known or suspect carcinogens.

12. Ecological Information
Ecotoxicity: Effects Data for 100% Glacial Acetic Acid 96 h LC-50 (fathead minnow): > 100mg/L 48 h LC-50 (mosquito fish): 251 mg/L 96 h LC-50 (daphnid): > 100 mg/L
Persistence and degradability: N/A
Bioaccumulation Potential (octanol-water partition coefficient, BCF): 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: This material is a strongly acidic aqueous solution, and this property may cause adverse environmental effects.

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.*
Aniline Blue (MSB) Stain

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 applicable.
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:** 01/31/2017

**NFPA**

| Health | 1 |
| Fire Hazard | 0 |
| Reactivity | 0 |
| Specific Hazard | 0 |

**National Fire Protection Association (USA) NFPA**

| Fire Hazard | 0 |
| Health | 1 |
| Reactivity | 0 |
| Specific Hazard | 0 |

**HMIS**

| Health | 1 |
| Flammability | 0 |
| Physical Hazard | 0 |
| Personal Protection | 0 |

**Hazardous Material Information System HMIS**

| Health | 1 |
| Flammability | 0 |
| Physical Hazard | 0 |
| Personal Protection | 0 |

**Notice to Reader:**

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*