# Material Safety Data Sheets

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Kit Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BVB05</td>
<td>BVBLUE® Test Kit</td>
</tr>
<tr>
<td>BVB10</td>
<td>BVBLUE® Test Kit</td>
</tr>
<tr>
<td>BVB10-1</td>
<td>BVBLUE® Test Kit</td>
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<tr>
<td>BVB25</td>
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<tr>
<td>BVB25NP</td>
<td>BVBLUE® Test Kit</td>
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<tr>
<td>BVB25E</td>
<td>BVBLUE® Test Kit</td>
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<tr>
<td>BVB05E</td>
<td>BVBLUE® Test Kit</td>
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<table>
<thead>
<tr>
<th>Item Number</th>
<th>Component Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BVBLUE® Developer Solution</td>
</tr>
<tr>
<td></td>
<td>BVBLUE® Testing Vessel</td>
</tr>
</tbody>
</table>
1. Product and Company Identification

Product Name: BVBLUE® Developer Solution
Synonym(s): Developer Solution; 1M Sodium hydroxide solution
Product Use: Component of BVBLUE® Test kit
   For use in the detection of sialidase enzyme activity in vaginal fluid specimens, to aid in the diagnosis of Bacterial Vaginosis infection.
Description: Dilute alkaline solution.

Gryphus Diagnostics, LLC
2280 Sutherland Avenue
Knoxville, TN 37919
Phone: 865-251-0101
Fax: 865-251-0108

Emergency Telephone Numbers
Gryphus Diagnostics: 1-800-924-4195
Poison Control: 1-800-876-4766

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>EC #</th>
<th>% (w/w)</th>
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<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>96</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>215-185-5</td>
<td>4</td>
</tr>
</tbody>
</table>

EC R-Phrases: NONE
EC Hazard Class: NONE


3. Hazards Identification

Emergency Overview: The chemical, physical and toxicological properties of this preparation, pertaining directly to occupational exposures, have not been thoroughly characterized.

Precautionary Statements:
DANGER! Corrosive to the eyes, skin, and mucous membranes. Irritating to respiratory system. Avoid contact with eyes and skin. Do not ingest. Do not breathe spray mist. Preparation appearance: clear, colorless liquid.

Potential Health Effects:
- **Inhalation:** Corrosive! Inhalation of mist can cause irritation, coughing, shortness of breath and wheezing.
  Substantial inhalation can cause build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath.
- **Eye:** Corrosive! Contact may cause irritation, severe burns, photophobia, and permanent eye damage.
- **Skin:** Corrosive! Skin contact causes redness, pain, burns, and ulceration. Symptoms may be delayed. Skin contact may not necessarily be followed by an immediate sensation of irritation or pain. Skin burns from dilute solution can develop slowly from prolonged contact.
- **Ingestion:** Corrosive! Ingestion can cause difficulty swallowing, spontaneous vomiting, and pain and burns in the mouth, throat, and gastrointestinal tract. Symptoms may be delayed.

Chronic Effects: Prolonged or repeated exposure through inhalation may damage respiratory system.
Medical Conditions Aggravated By Exposure:

Persons with pre-existing skin disorders, eye problems, or respiratory disorders may be more susceptible to the effects of sodium hydroxide solution.

Target Organs: Possible: eyes, respiratory system and skin.

4. First Aid Measures

**Inhalation:** If inhaled, immediately move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop. If breathing is difficult, give oxygen. If breathing has ceased, supply artificial respiration using oxygen and suitable mechanical device, such as a bag and mask.

**Eye Contact:** Immediately flush eyes with plenty of tepid water while separating eyelids with fingers, removing contact lenses if worn. Continue to flush for 15 to 30 minutes. Obtain immediate medical attention.

**Skin Contact:** In case of contact, immediately flush skin with cool water and remove contaminated clothing. Continue to flush with plenty of water for at least 15 minutes. Avoid spreading material on unaffected skin. Watch for delayed symptoms. Cover wound with sterile dressing. Seek medical attention for skin exposures that result in pain, burns, or noticeable redness or irritation.

**Ingestion:** In case of ingestion, if conscious and alert, rinse mouth out with water first, then drink 4 to 8 ounces (120 to 240 mL) of water or milk. Do not induce vomiting. If vomiting occurs, lean sitting person forward, if lying down, roll them onto their left side (head-down position if possible), to maintain an airway and prevent aspiration. Get immediate medical attention.

5. Fire Fighting Measures

**Flammable Properties:** Aqueous solutions are typically non-flammable.

**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific Hazards Arising from the Chemical:** Non-combustible, substance itself does not burn.

**Standard Protective Equipment and Precautions for Firefighters:** As in any fire, firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. Accidental Release Measures

**Personal Precautions:** Wear Personal Protective Equipment (PPE) as indicated in Section 8. Avoid physical contact with material. Change into clean clothes promptly if clothing has been contaminated. Wash hands thoroughly after handling.

**Environmental Precautions:** Do not let product enter drains. Do not flush into surface water or sanitary sewer system. US EPA Regulations require the reporting of spills and releases of CERCLA Hazardous Substances to soil, water and air in excess of established reportable quantities (RQ). To report a release or spill, contact the federal government's National Response Center at 1-800-424-8802. The NRC is staffed 24-hours a day with U.S. Coast Guard personnel who will facilitate a federal emergency response action if necessary.
Methods and Materials for Containment and Clean-Up:

- Treat caustic, alkali spill with neutralizer product. Soak up with inert absorbent material.
- Scoop into suitable dry container for disposal. Clean contaminated surface thoroughly.
- Dispose of spilled material and contaminated waste in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. Handling and Storage

Handling:
Follow good laboratory hygiene practices. Wear proper Personal Protective Equipment (PPE) and employ exposure controls as indicated in Section 8. Avoid physical contact. Use only in area provided with appropriate exhaust ventilation. Wash hands thoroughly after handling.

Storage:
Refer to product label and/or literature for specific storage conditions.

8. Exposure Controls/Personal Protection

Exposure Guidelines:

- ACGIH - Occupational Exposure Limits - Ceilings
  Sodium hydroxide 1310-73-2  2 mg/m3 Ceiling
- ACGIH - Occupational Exposure Limits - TLV Basis - Critical Effects
  Sodium hydroxide 1310-73-2  irritation
- Belgium - Occupational Exposure Limits - TWA
  Sodium hydroxide 1310-73-2  2 mg/m3 VLE
- Canada - Quebec - Occupational Exposure Limits - Ceilings
  Sodium hydroxide 1310-73-2  2 mg/m3 Ceiling
- Denmark - Occupational Exposure Limits - Ceilings
  Sodium hydroxide 1310-73-2  2 mg/m3 Ceiling
- France - Occupational Exposure Limits - TWAs (VMEs)
  Sodium hydroxide 1310-73-2  2 mg/m3 VME
- Germany - TRGS 900 - Occupational Exposure Limits - TWAs
  Sodium hydroxide 1310-73-2  2 mg/m3 TWA (inhalable fraction)
- Greece - Occupational Exposure Limits - STELs
  Sodium hydroxide 1310-73-2  2 mg/m3 STEL
- Greece - Occupational Exposure Limits - TWAs
  Sodium hydroxide 1310-73-2  2 mg/m3 TWA
- Ireland - Occupational Exposure Limits - STELs
  Sodium hydroxide 1310-73-2  2 mg/m3 STEL
- Japan - Occupational Exposure Limits - Ceiling limits
  Sodium hydroxide 1310-73-2  2 mg/m3 Ceiling
- Korea - Occupational Exposure Limits - Ceilings
  Sodium hydroxide 1310-73-2  2 mg/m3 Ceiling
- Netherlands - Occupational Exposure Limits - Ceilings
  Sodium hydroxide 1310-73-2  2 mg/m3 Ceiling
- NIOSH - Pocket Guide - Ceiling Limits
  Sodium hydroxide 1310-73-2  2 mg/m3 Ceiling
- NIOSH - Pocket Guide - IDLHs (Immediately Dangerous to Life or Health)
  Sodium hydroxide 1310-73-2  10 mg/m3 IDLH
- Norway - Occupational Exposure Limits - Ceilings
  Sodium hydroxide 1310-73-2  2 mg/m3 Ceiling
- OSHA - Final PELs - Time Weighted Averages (TWAs)
  Sodium hydroxide 1310-73-2  2 mg/m3 TWA
- Spain - Occupational Exposure Limits - STELs (VLA-EC)
Material Safety Data Sheet
Diagnōsit® BVBLUE® Developer Solution

Sodium hydroxide 1310-73-2 2 mg/m3 VLA-EC
Sweden - Occupational Exposure Limits - Ceilings (CLVs)
Sodium hydroxide 1310-73-2 2 mg/m3 Ceiling
Switzerland - Occupational Exposure Limits - STELs
Sodium hydroxide 1310-73-2 2 mg/m3 STEL (inhalable)
Switzerland - Occupational Exposure Limits - TWAs
Sodium hydroxide 1310-73-2 2 mg/m3 MAK (inhalable)

Engineering Controls: Provide adequate ventilation by means of mechanical exhaust, to keep airborne concentrations low. Local exhaust is preferred, because it can control the emissions of the contaminant at its source, preventing dispersion into the general work area. Facilities storing or utilizing this preparation should be equipped with an eyewash fountain and a safety shower.

Personal Protective Equipment (PPE):

Respiratory A respiratory protection program that meets U.S. Federal OSHA 29 CFR 1910.134 and ANSI Z99.2, Canadian CSA Standard Z94.4-93, European Standard CR 529, or other applicable regulatory standards must be followed whenever exposure limits are exceeded and engineering controls are not feasible, or if insufficient ventilation or workplace conditions warrant a respirator's use. In such cases an air purifying respirator equipped with appropriate vapor cartridges, selected to provide a filtration efficiency appropriate to your workplace, is recommended.

Eye/Face Wear appropriate protective safety eye wear as described in the ANSI standard 787.1-2003. If splashes are likely to occur, wear a face shield as well. Wearing contact lenses is not recommended when working with this material.

Skin Wear appropriate protective clothing, such as a lab coat or other long-sleeved garment over your clothes, to minimize contact and contamination of clothing. Wear an impervious apron if needed. Change into clean clothes promptly if clothing becomes contaminated. Wear rubber boots for spill clean-up.

Gloves Prevent skin exposure by wearing protective gloves impermeable to this material/preparation. Change gloves regularly or immediately if they are contaminated, torn or punctured. Gloves with a breakthrough resistance time longer than 8 hours are recommended. Wear heavy (30 mil) butyl rubber gloves for spill clean up.

General Consult your company's safety manager/industrial hygienist or your safety equipment manufacturer/supplier for assistance with your selection of appropriate PPE.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid</td>
</tr>
<tr>
<td>pH</td>
<td>13-14</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
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<tr>
<td>Solubility</td>
<td>Miscible in water</td>
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<tr>
<td>Specific Gravity</td>
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<td>Vapor Pressure:</td>
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<td>Boiling Point:</td>
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<tr>
<td>Partition Coefficient</td>
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<tr>
<td>Melting Point:</td>
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</tr>
<tr>
<td>(n-octanol/water):</td>
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</tr>
<tr>
<td>Freezing Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not available</td>
</tr>
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</table>
10. Stability and Reactivity

Chemical Stability: Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).

Conditions to Avoid: Avoid heat, moisture and freezing.

Incompatible Materials: Physical Properties - Chemical Incompatibilities
Sodium hydroxide 1310-73-2 Water, acids, flammable liquids, organic halogens, metals: aluminum, tin, zinc; nitromethane and nitro compounds

Hazardous Decomposition Products: None expected under normal conditions of use.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

11. Toxicological Information

Routes Of Exposure: Typical occupational exposure routes are inhalation, eye and skin contact.

Effects of Exposure: The chemical, physical and toxicological properties of this preparation, pertaining directly to occupational exposures, have not been thoroughly characterized.

Acute Effects: Corrosive to the eyes, skin, and mucous membranes. Irritating to respiratory system.

California - Acute Reference Exposure Levels (RELs)
Sodium hydroxide 1310-73-2 8 ug/m3 REL

Irritation:

<table>
<thead>
<tr>
<th>Route</th>
<th>Test</th>
<th>Severity</th>
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</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Draize Test, Rabbit, Severe, 500 mg/24H (Sodium hydroxide)</td>
<td></td>
</tr>
<tr>
<td>Eye</td>
<td>Draize Test: Rabbit, Severe, 50 µg/24H (Sodium hydroxide)</td>
<td></td>
</tr>
</tbody>
</table>

Chronic Effects: Prolonged or repeated exposure through inhalation may damage the respiratory system.

Target Organs: Preparations expected target organ(s): eyes, respiratory system and skin.

Carcinogenicity: None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Teratogenicity: Switzerland - Developmental Risk Group
Sodium hydroxide 1310-73-2 Developmental Risk Group = C

12. Ecological Information

Ecotoxicity: No information available for product.

13. Disposal Considerations

Methods of Disposal: Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.
Packaging: Containers of this material may retain product residues. Handle contaminated packaging in the same way as the substance itself, by disposing in accordance with all applicable federal, state, local, and provincial environmental and hazardous waste regulations. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

Waste Classification: Chemical waste generators must refer to the relevant hazardous waste regulations to ensure complete and accurate classification. Disposal regulations may vary according to geographic location.

California - Presumed Hazardous Wastes
Sodium hydroxide 1310-73-2 Toxic; Corrosive

14. Transport Information

Additional Information: Contact Gryphus Diagnostics for specific shipping information.

15. Regulatory Information

US Federal Regulations:

- CERCLA/SARA - Hazardous Substances and their Reportable Quantities
  Sodium hydroxide 1310-73-2 1000 lb final RQ; 454 kg final RQ
- CWA (Clean Water Act) - Reportable Quantities of Designated Hazardous Substances
  Sodium hydroxide 1310-73-2 1,000 lb RQ
- Inventory - United States - Section 8(b) Inventory (TSCA)
  Sodium hydroxide 1310-73-2 XU

US State Regulations:

- California - Directors List of Hazardous Substances (8 CCR 339)
  Sodium hydroxide 1310-73-2 [present]
- Massachusetts - Right To Know List
  Sodium hydroxide 1310-73-2 [present]
- New Jersey - Department of Health RTK List
  Sodium hydroxide 1310-73-2 sn 1706
- Pennsylvania - RTK (Right to Know) List
  Sodium hydroxide 1310-73-2 environmental hazard

International Regulations:

- This product is regulated under the In Vitro Diagnostic Medical Devices Directive (98/79/EC).
- Canada - WHMIS - Classifications of Substances
  Sodium hydroxide 1310-73-2 E
- Canada - WHMIS - Ingredient Disclosure
  Sodium hydroxide 1310-73-2 1%; English Item 1442; French Item 998
- EU - Dangerous Substances Directive (67/548/EEC) - Annex I - Classification
  Sodium hydroxide 1310-73-2 C; R-35
- EU - Dangerous Substances Directive (67/548/EEC) - Annex I - Concentration Limits
  Sodium hydroxide 1310-73-2 5%; C; R-35 .2%; C; R-34 .0.5%; Xi; R-36/38
  Sodium hydroxide 1310-73-2 S-1/2 S-26 S-37/39 S-45
- Germany - Water Classification (VwVwS) - Water Hazard Classes
  Sodium hydroxide 1310-73-2 1; footnote 8
- Inventory - Australia - Inventory of Chemical Substances (AICS)
  Sodium hydroxide 1310-73-2 Present
- Inventory - Canada - Domestic Substances List (DSL)
  Sodium hydroxide 1310-73-2 Present
Inventory - China
Sodium hydroxide 1310-73-2 Present

Inventory - European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)
Sodium hydroxide 1310-73-2 215-185-5

Inventory - Japan Existing and New Chemical Substances (ENCS)
Sodium hydroxide 1310-73-2 1-410; 2-1972

Switzerland - Toxic Substances Classification
Sodium hydroxide 1310-73-2 Giftklasse 2 (>5%, G-4490); Giftklasse 3 (1-5%, G-4491); Giftklasse 4 (<1%, G-4492)

Canadian Hazardous Products: WHMIS Status Controlled

Canadian Hazardous Products Classification
E - Corrosive

European Communities Dangerous Substances/Preparations:
Symbols
EC Classification C - Corrosive

Risk Phrases
R35 Causes severe burns.

Safety Phrases
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 Wear suitable gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16. Other Information
Recommended Use: For in vitro diagnostic use only. Not for human or drug use.

Further Information: BVBLUE® is a registered trademark of Gryphus Diagnostics, LLC.

This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the US OSHA Hazard Communication Standard, European Communities Safety Data Sheets Directive, Canadian Controlled Products Regulations, UK Chemical Hazard Information and Packaging Regulations, and UN Globally Harmonized System of Classification and Labeling of Chemicals.
The hazard ratings on this MSDS are for appropriately trained workers using a Hazardous Materials Identification System (HMIS®) or a National Fire Protection Association (NFPA) 704 program. The ratings are estimates and should be treated as such. The hazard rating scales range from (0) minimal hazards to (4) significant hazards or risks. Chronic (long-term) health effects are indicated in the HMIS® by an asterisk (*). HMIS® is a registered trade and service mark of the NPCA. For details on HMIS® ratings visit www.paint.org/hmis. For details on NFPA 704 visit www.nfpa.org.

**HMIS® RATINGS**

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>2</th>
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<tbody>
<tr>
<td>FLAMMABILITY</td>
<td>0</td>
</tr>
<tr>
<td>PHYSICAL HAZARD</td>
<td>1</td>
</tr>
</tbody>
</table>

**NFPA RATINGS**

| 2 | 0 |

**Target Organ(s):**
- Eyes
- Respiratory System
- Skin

**Disclaimer:**
The information above is provided in good faith. It is believed to be accurate and represents the best information currently available to us. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER TYPE, EXPRESSED OR IMPLIED, WITH RESPECT TO PRODUCTS DESCRIBED OR DATA OR INFORMATION PROVIDED, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OF SUCH PRODUCTS, DATA OR INFORMATION. Users should make their own investigations to determine the suitability of the information for their particular purposes, and the user assumes all risk arising from their use of the material. The user is required to comply with all laws and regulations relating to the purchase, use, storage and disposal of the material, and must be familiar with and follow generally accepted safe handling procedures. In no event shall Gryphus Diagnostics be liable for any claims, losses, or damages of any individual or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Gryphus Diagnostics has been advised of the possibility of such damages.
1. Product and Company Identification

Product Name: BVBLUE® Testing Vessel
Synonym(s): Testing Vessel
Product Use: Component of BVBLUE® Test kit
For use in the detection of sialidase enzyme activity in vaginal fluid specimens, to aid in the diagnosis of Bacterial Vaginosis infection. For in vitro diagnostic use only.
Description: Aqueous salt solution containing a chromogenic substrate of the sialidase enzyme.

Gryphus Diagnostics, LLC
2280 Sutherland Avenue
Knoxville, TN 37919
Phone: 865-251-0101
Fax: 865-251-0108

Emergency Telephone Numbers
Gryphus Diagnostics: 1-800-924-4195
Poison Control: 1-800-876-4766

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>EC #</th>
<th>% (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>95</td>
</tr>
<tr>
<td>Potassium acetate</td>
<td>127-08-2</td>
<td>204-822-2</td>
<td>4.9</td>
</tr>
<tr>
<td>IBX-4041 (chromogenic substrate compound)</td>
<td>Not Assigned</td>
<td>Not Assigned</td>
<td>0.05</td>
</tr>
</tbody>
</table>


3. Hazards Identification

Emergency Overview: The chemical, physical and toxicological properties of this preparation, pertaining directly to occupational exposures, have not been thoroughly characterized.
Precautionary Statements: May be irritating to eyes and skin. Avoid contact with eyes and skin. Do not ingest or inhale. Preparation appearance: clear liquid.

Potential Health Effects:

Inhalation: Aerosol inhalation may cause sneezing, coughing or irritation of the nasal passages and throat.
Eye: Eye exposure may cause irritation, redness, tearing and pain.
Skin: Skin contact may cause irritation, redness, dryness and itching.
Ingestion: If large amounts are ingested, symptoms could include gastric irritation, nausea and diarrhea.
Chronic Effects: Chronic effects from repeated or long-term occupational exposure to this preparation are unknown.
Target Organs: Unknown.
4. First Aid Measures

Inhalation: If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye Contact: Immediately flush eyes with plenty of tepid water while separating eyelids with fingers, removing contact lenses if worn. Continue to flush for at least 15 minutes. Obtain immediate medical attention.

Skin Contact: In case of contact, flush skin with copious amounts of cool water and remove contaminated clothing. Wash material from skin with soap and water and rinse thoroughly with clean water. Obtain medical attention if needed or if irritation or other symptoms develop.

Ingestion: In case of ingestion, contact a poison control center or physician for instructions. If conscious and alert, rinse mouth out with water. Obtain immediate medical attention.

5. Fire Fighting Measures

Flammable Properties: Aqueous solutions are typically non-flammable.

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific Hazards Arising from the Chemical: Non-combustible, substance itself does not burn.

Standard Protective Equipment and Precautions for Firefighters: As in any fire, firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. Accidental Release Measures

Personal Precautions: Wear Personal Protective Equipment (PPE) as indicated in Section 8. Avoid physical contact with material. Wash hands thoroughly after handling.

Methods and Materials for Containment and Clean-Up: Carefully soak up spilled liquid with a non-combustible sorbent. Scoop up spilled material and transfer to an appropriate container for disposal. After material pickup is complete, wash spill site to remove any residual material and dry completely. Dispose of spilled material and contaminated waste in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. Handling and Storage

Handling: Follow good laboratory hygiene practices. Wear proper Personal Protective Equipment (PPE) and employ exposure controls as indicated in Section 8. Avoid physical contact. Wash hands thoroughly after handling.

Storage: Refer to product label and/or literature for specific storage conditions.

8. Exposure Controls/Personal Protection
Exposure Guidelines: Not Established.

Engineering Controls: This preparation is aqueous and non-volatile and is not expected to necessitate special ventilation measures. A dilution ventilation system is a suitable health hazard control for this preparation. Facilities storing or utilizing this preparation should be equipped with an eyewash fountain and a safety shower.

Personal Protective Equipment (PPE):

Respiratory A respiratory protection program that meets U.S. Federal OSHA 29 CFR 1910.134 and ANSI Z99.2, Canadian CSA Standard Z94.4-93, European Standard CR 529, or other applicable regulatory standards must be followed whenever exposure limits are exceeded and engineering controls are not feasible, or if insufficient ventilation or workplace conditions warrant a respirator's use. In such cases an air purifying respirator equipped with appropriate vapor cartridges, selected to provide a filtration efficiency appropriate to your workplace, is recommended.

Eye/Face Wear appropriate protective safety eye wear as described in the ANSI standard 787.1-2003.

Skin Wear appropriate protective clothing, such as a lab coat or other long-sleeved garment over your clothes, to minimize contact and contamination of clothing. Change into clean clothes promptly if clothing becomes contaminated. Remove and wash contaminated clothing before re-use.

Gloves Prevent skin exposure by wearing protective gloves impermeable to this material/preparation. Change gloves regularly or immediately if they are contaminated, torn or punctured.

General Consult your company's safety manager/industrial hygienist or your safety equipment manufacturer/supplier for assistance with your selection of appropriate PPE.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>5.5 – 6.0</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
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<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
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</table>

10. Stability and Reactivity

Chemical Stability: Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).

Conditions to Avoid: Strong light, high humidity and excessive heat may damage the product.

Incompatible Materials: Unknown

Hazardous Decomposition Products: None expected under normal conditions of use.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
11. Toxicological Information

Routes Of Exposure: Typical occupational exposure routes are eye and skin contact.

Effects of Exposure: The chemical, physical and toxicological properties of this preparation, pertaining directly to occupational exposures, have not been thoroughly characterized.

Acute Effects: May be irritating to the eyes and skin.

NIOSH - Selected LD50s and LC50s
Potassium acetate 127-08-2 Oral LD50 Rat: 3250 mg/kg

Chronic Effects: Data indicating the presence or absence of chronic effects from repeated or long-term occupational exposure to this preparation is not yet available.

Target Organs: Preparation's expected target organ(s): unknown.

Carcinogenicity: None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

12. Ecological Information

Ecotoxicity: No information available for product.

13. Disposal Considerations

Methods of Disposal: Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

Packaging: Containers of this material may retain product residues. Handle contaminated packaging in the same way as the substance itself, by disposing in accordance with all applicable federal, state, local, and provincial environmental and hazardous waste regulations. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

Waste Classification: Chemical waste generators must refer to the relevant hazardous waste regulations to ensure complete and accurate classification. Disposal regulations may vary according to geographic location.

14. Transport Information

Additional Information: Contact Gryphus Diagnostics for specific shipping information.

15. Regulatory Information

US Federal Regulations: This preparation is a component of an FDA-regulated in vitro diagnostic device.

Inventory - United States - Section 8(b) Inventory (TSCA)
Potassium acetate 127-08-2 Present
International Regulations:

This product is regulated under the In Vitro Diagnostic Medical Devices Directive (98/79/EC).

Canada - WHMIS - Classifications of Substances
Potassium acetate 127-08-2 Uncontrolled product according to WHMIS classification criteria.

Germany - Water Classification (VwVwS) - Water Hazard Classes
Potassium acetate 127-08-2 1

Inventory - Australia - Inventory of Chemical Substances (AICS)
Potassium acetate 127-08-2 Present

Inventory - Canada - Domestic Substances List (DSL)
Potassium acetate 127-08-2 Present

Inventory - China
Potassium acetate 127-08-2 Present

Inventory - European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)
Potassium acetate 127-08-2 204-822-2

Inventory - Japan Existing and New Chemical Substances (ENCS)
Potassium acetate 127-08-2 2-692

Switzerland - Toxic Substances Classification
Potassium acetate 127-08-2 Giftklasse 5

Canadian Hazardous Products:

WHMIS Status Non-Controlled

European Communities Dangerous Substances/Preparations:

EC Classification None
Risk Phrases None
Safety Phrases S24/25 Avoid contact with skin and eyes.

16. Other Information

Recommended Use: For in vitro diagnostic use only. Not for human or drug use.

Further Information: BVBLUE® is a registered trademark of Gryphus Diagnostics, LLC.

This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the US OSHA Hazard Communication Standard, European Communities Safety Data Sheets Directive, Canadian Controlled Products Regulations, UK Chemical Hazard Information and Packaging Regulations, and UN Globally Harmonized System of Classification and Labeling of Chemicals.

The hazard ratings on this MSDS are for appropriately trained workers using a Hazardous Materials Identification System (HMIS®) or a National Fire Protection Association (NFPA) 704 program. The ratings are estimates and should be treated as such. The hazard rating scales range from (0) minimal hazards to (4) significant hazards or risks. Chronic (long-term) health effects are indicated in the HMIS® by an asterisk (*). HMIS® is a registered trade and service mark of the NPCA. For details on HMIS® ratings visit www.paint.org/hmis. For details on NFPA 704 visit www.nfpa.org.
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