SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: Biologic Quality Control Level I and II (Glass Vial)

1.2. Intended Use of the Product
Use of the substance/mixture: Use as quality control for the TEG® analyzer.

1.3. Name, Address, and Telephone of the Responsible Party
Haemonetics
400 Wood Road
Braintree, MA 02184

1.4. Emergency Telephone Number
Emergency Number: (800) 438-2834

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
GHS-US classification
Comb. Dust
Full text of hazard classes and H-statements: see section 16

2.2. Label Elements
GHS-US Labeling
Signal Word (GHS-US): Warning
Hazard Statements (GHS-US): May form combustible dust concentrations in air.

2.3. Other Hazards
Exposure may aggravate pre-existing eye, skin, or respiratory conditions. The product contains animal source material, therefore should be treated as potentially infectious. Universal precautions should be used when handling all biologic material.

2.4. Unknown Acute Toxicity (GHS-US)
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier (CAS No)</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrated Bovine Plasma</td>
<td>N/A</td>
<td>30-70</td>
<td>Not classified</td>
</tr>
<tr>
<td>1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-Hepes Buffer</td>
<td>(CAS No) 7365-45-9</td>
<td>15-65</td>
<td>Not classified</td>
</tr>
<tr>
<td>Blood-coagulation factor III (Tissue Factor)</td>
<td>(CAS No) 9035-58-9</td>
<td>5-15</td>
<td>Comb. Dust</td>
</tr>
<tr>
<td>Sodium azide</td>
<td>(CAS No) 26628-22-8</td>
<td>0.0045-0.0075</td>
<td>Aquatic Acute 1, H400 STOT RE 2, H373 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures
First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/Injuries: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/Injuries After Inhalation: Dust may be harmful or cause irritation.
Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.
Chronic Symptoms: None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media
Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture
Fire Hazard: Combustible Dust.
Explosion Hazard: Dust explosion hazard in air.
Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters
Precautionary Measures Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Other Information: Risk of dust explosion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
6.1.1. For Non-emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).

6.1.2. For Emergency Responders
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions
Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.
Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill. Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use only non-sparking tools.

6.4. Reference to Other Sections
See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.
Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust. Avoid creating or spreading dust. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.
7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Products: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Use as quality control for the TEG® analyzer.

SECTION 8: EXPOSURE CONTROLS/PERSOHAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

<table>
<thead>
<tr>
<th>Substance</th>
<th>USA ACGIH ACGIH Ceiling (mg/m³)</th>
<th>USA ACGIH ACGIH Ceiling (ppm)</th>
<th>USA ACGIH ACGIH chemical category</th>
<th>USA NIOSH NIOSH REL (ceiling) (mg/m³)</th>
<th>USA NIOSH NIOSH REL (ceiling) (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide (26628-22-8)</td>
<td></td>
<td></td>
<td>Not Classifiable as a Human Carcinogen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium azide</td>
<td>0.29 mg/m³</td>
<td>0.11 ppm (vapor)</td>
<td></td>
<td>0.3 mg/m³</td>
<td>0.1 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.


Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State: Solid

Appearance: Yellowish to light amber lyophilized powder

Odor: No data available

Odor Threshold: No data available

pH: 6.9 - 7.9
Evaporation Rate: No data available
Melting Point: No data available
Freezing Point: No data available
Boiling Point: No data available
Flash Point: No data available
Auto-ignition Temperature: No data available
Decomposition Temperature: No data available
Flammability (solid, gas): No data available
Vapor Pressure: No data available
Relative Vapor Density at 20 °C: No data available
Relative Density: No data available
Solubility: Soluble in water.
Partition Coefficient: N-Octanol/Water: No data available
Viscosity: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.
10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Dust accumulation (to minimize explosion hazard).
10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects
Acute Toxicity: Not classified

| 1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9) |
|---------------------------------|----------------|
| LD50 Oral Rat          | > 2000 mg/kg  |
| LD50 Dermal Rat        | > 2000 mg/kg  |

<table>
<thead>
<tr>
<th>Sodium azide (26628-22-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral Rat</td>
</tr>
<tr>
<td>27 mg/kg</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation: Not classified
pH: 6.9 - 7.9
Serious Eye Damage/Irritation: Not classified
pH: 6.9 - 7.9
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Dust may be harmful or cause irritation.
Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.
Chronic Symptoms: None known.
SECTION 12: ECOLOGICAL INFORMATION


<table>
<thead>
<tr>
<th>Substance (EC number)</th>
<th>LC50 Fish 1</th>
<th>EC50 Daphnia 1</th>
<th>NOEC chronic fish</th>
<th>NOEC chronic crustacea</th>
<th>NOEC chronic algae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)</td>
<td>&gt; 100 mg/l (Exposure Time: 96 h - Species: Brachydanio rerio)</td>
<td>&gt; 100 mg/l (Exposure Time: 48 h - Species: Daphnia magna)</td>
<td>&gt;= 100 mg/l (Test Duration: 96 h - Species: Brachydanio rerio)</td>
<td>0.0178 g/l (Daphnia magna)</td>
<td>&gt; 100 mg/l</td>
</tr>
</tbody>
</table>

12.2.  Persistence and Degradability

Biologic Quality Control Level I and II (Glass Vial)

Persistence and Degradability  Not established.

12.3.  Bioaccumulative Potential

Biologic Quality Control Level I and II (Glass Vial)

Bioaccumulative Potential  Not established.

12.4.  Mobility in Soil  No additional information available

12.5.  Other Adverse Effects

Other Information  Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1.  Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions. Refer to local statutory requirements and the Biohazardous Waste Disposal Guidelines for proper disposal instructions.


SECTION 14: TRANSPORT INFORMATION

14.1.  In Accordance with DOT  Not regulated for transport

14.2.  In Accordance with IMDG  Not regulated for transport

14.3.  In Accordance with IATA  Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1  US Federal Regulations

Blood-coagulation factor III (9035-58-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sodium azide (26628-22-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the United States SARA Section 302
Subject to reporting requirements of United States SARA Section 313

SARA Section 302 Threshold Planning Quantity (TPQ)  500 (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)

SARA Section 313 - Emission Reporting  1.0 %

15.2  US State Regulations

Sodium azide (26628-22-8)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List
Biologic Quality Control Level I and II (Glass Vial)
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 15/April/2016
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

<table>
<thead>
<tr>
<th>GHS Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2 (Oral)</td>
<td>Acute toxicity (oral) Category 2</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 1</td>
</tr>
<tr>
<td>Comb. Dust</td>
<td>Combustible Dust</td>
</tr>
<tr>
<td>STOT RE 2</td>
<td>Specific target organ toxicity (repeated exposure) Category 2</td>
</tr>
<tr>
<td>Comb. Dust</td>
<td>May form combustible dust concentrations in air</td>
</tr>
<tr>
<td>H300</td>
<td>Fatal if swallowed</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)