I. Product and Company Identification

Product Name: Piccolo® Reagent Disc – Metlyte 8
A point of care blood diagnostic product

Part Numbers: 400-1023(single); 400-0023(10 pack); 400-0023-4 (4 Pack)

Company Information:
Abaxis, Inc.
3240 Whipple Road
Union City, CA 94587
Tel: +1-510-675-6500
Fax: +1-510-441-6150

Abaxis Europe GmbH
Bunsenstr. 9-11
64347 Griesheim, Germany
Tel: +49 6155 780 21 0 (EU)
Fax: +49 6155 780 21 111

Customer Support: +1-800-822-2947 (US), Tel:+49 6155 780 21 0 (EU)

II. Hazard Identification

Hazard Classification: Irritant
Contact with the components of this disc may cause irritation to skin and eyes

OSHA Hazards: No known OSHA hazards

GHS Hazards: In accordance with Regulations (EC) No 1272/2008 and EU Directives 67/548/EEC

Warning

CLP Hazards:
H302 Harmful if swallowed
H315 Causes skin irritation
H335 May cause respiratory irritation
H401 To avoid risks to human health and the environment, comply with the instructions for use
P273 Avoid release to the environment
P235 Keep cool (2-8°C)
P308 + P313 If exposed or concerned: Get medical advice/attention

HMIS Ranking:
Health hazard 1
Flammability 0
Physical hazards 0

NFPA Rating:
Health hazard 1
Fire 0
Reactivity Hazard 0

Potential Health Effects:
Inhalation May cause respiratory tract irritation
Skin May cause skin irritation
Eyes May cause eye irritation

III. Composition/Information on Ingredients

This product consists of reagent beads comprised of a mixture of low hazard lyophilized chemicals beads enclosed in a plastic rotor. These beads are in concentrations not associated with human or environmental toxicity, which contain among the listed items, enzymes, preservatives and stabilizers in concentrations under 1%. Each rotor contains a cup of diluent containing less than 0.5 ml of water and preservatives in concentrations of less than 1%. Table 1 below lists the chemicals present in the panel in concentrations of greater than 1%:

**TABLE 1**

<table>
<thead>
<tr>
<th>NAME OF SUBSTANCE</th>
<th>%</th>
<th>CAS#</th>
<th>EC#</th>
<th>HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>D- Mannitol</td>
<td>17.5</td>
<td>69-65-8</td>
<td>200-711-8</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>D(+)Trehalose</td>
<td>8.9</td>
<td>6138-23-4</td>
<td>202-739-6</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Polyethylene glycol, 8000</td>
<td>6.8</td>
<td>25322-68-3</td>
<td>500-038-2</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Dextran, 70 USP</td>
<td>7.5</td>
<td>9004-54-0</td>
<td>232-677-5</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Tris(hydroxymethyl)amino methane</td>
<td>9.2</td>
<td>77-86-1</td>
<td>201-064-4</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Polyethylene glycol, 3400</td>
<td>2.7</td>
<td>25322-68-3</td>
<td>500-038-2</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Polyethylene glycol, BioUltra 2000</td>
<td>1.5</td>
<td>9004-74-4</td>
<td>215-801-2</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>3.5</td>
<td>7647-14-5</td>
<td>231-598-3</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Citric Acid trisodium</td>
<td>6.9</td>
<td>6132-04-3</td>
<td>200-675-3</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>MOPS (free acid)</td>
<td>1.2</td>
<td>1132-61-2</td>
<td>214-478-5</td>
<td>Skin Irrit. 2</td>
</tr>
</tbody>
</table>
### TABLE 1 continued

<table>
<thead>
<tr>
<th>NAME OF SUBSTANCE</th>
<th>%</th>
<th>CAS#</th>
<th>EC#</th>
<th>HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPSO</td>
<td>4.9</td>
<td>68189-43-5</td>
<td>269-199-1</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>PEG 2000</td>
<td>4.0</td>
<td>9004-74-4</td>
<td>215-801-2</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>EDTA, disodium</td>
<td>2.2</td>
<td>6381-92-6</td>
<td>205-358-3</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>HEPES</td>
<td>2.2</td>
<td>7365-45-9</td>
<td>230-907-9</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Triton X-100</td>
<td>1.3</td>
<td>9002-93-1</td>
<td>Not Found</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Bovuminar Reagent Pure Powder</td>
<td>4.0</td>
<td>9048-46-8</td>
<td>232-936-2</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>TBHBA</td>
<td>1.1</td>
<td>14348-40-4</td>
<td>Not Found</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>EDTA, tetrasodium salt</td>
<td>1.1</td>
<td>10378-23-1</td>
<td>200-573-9</td>
<td>Skin Irrit. 2</td>
</tr>
</tbody>
</table>

### IV. First Aid Measures

**In case of eye contact:** Flush eyes with copious amounts of water for a minimum of 15 minutes

**In case of inhalation:** Allow the victim to rest in a well-ventilated area. Seek immediate medical attention

**In case of skin contact:** Flush exposed skin with copious amounts of water for a minimum of 15 minutes

**In case of ingestion:** Contact a physician in case of ingestion

### V. Fire-Fighting Measures

No flammable properties are associated with this product.

**Extinguishing media:** Use water spray, dry chemical or carbon dioxide

**Hazardous combustion products:** May result in the formation of nitrogen and carbon oxides

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary

**Additional information:** Combustion of the plastic rotor containing this preparation may result in toxic particulates and gases

### VI. Accidental Release Measures

**Personal precautions:**

**Eye Protection**

Wear safety goggles or a face shield when cleaning up spills

**Skin Protection**

Wear protective attire that prevents contamination of skin and personal clothing
Hand Protection: Wear nitrile or vinyl gloves that cover exposed skin.

Other Protection: Avoid breathing mists, dusts, and aerosols.

Environmental Controls: Prevent spilled product from entering drains.

Spill Clean-up Measures: Contain the material to prevent it from becoming airborne. Place absorbent material on top of, and around the perimeter of the spill. Sweep up the spilled material and decontaminate the area with soap and water or an equivalent cleaner.

VII. Handling and Storage

This product is to be stored inside its packaging at 2-8°C in a cool, dry location. Wear gloves when handling the product and wash hands after removing gloves.

VIII. Exposure Controls/Personal Protection

None of the chemicals in this preparation are assigned occupational exposure limits. This product can be safely handled under normal conditions with no controls.

Engineering Controls: Provide ventilation in work areas where this product is handled.

Personal Protective Equipment: Safety glasses and chemical-resistant gloves recommended.

IX. Physical and Chemical Properties

Physical state: Solid. Spherical lyophilized beads are enclosed in a sealed plastic package.

Color: Multi-colored beads.

Odor: Odorless.

Odor threshold: None established.

Chemical Properties: None available for:
- pH, Melting point
- Boiling point
- Flash point
- Lower Explosive Limit
- Upper Explosive Limit
- Vapor pressure
- Vapor density (air=1)
- Density (g/cm³)
- Water solubility (20°C in g/l)
- Auto ignition temperature
X. Stability and Reactivity

Reactivity: This preparation is not known to be reactive violently

Chemical Stability: This preparation is known to be chemically stable

Thermal Decomposition: Will decompose when burned

Conditions to Avoid: Sunlight, heat (temperatures above 32°C)

Incompatible Materials: No data available

Hazardous Decomposition Products: No harmful decomposition products known

Storage Conditions: Store under dry, in a cool (2-8°C), dry location

XI. Toxicological Information

No information found on Specific Symptoms. The toxicological properties of this preparation have not been fully investigated. Table 2 below lists the chemicals contained in the Panel and their toxicology information:

TABLE 2

<table>
<thead>
<tr>
<th>NAME OF SUBSTANCE</th>
<th>ACUTE TOXICITY</th>
<th>CHRONIC TOXICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; / LC&lt;sub&gt;50&lt;/sub&gt;</td>
<td>(CMR)&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>D- Mannitol</td>
<td>13,500 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>D(+)-Trehalose, Dihydrate</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Dextran, 70 USP</td>
<td>10,700 mg/kg (scu, Rat)</td>
<td>Reproductive effects to women at high doses</td>
</tr>
<tr>
<td>Bovuminar reagent pure powder</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>HEPES</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>POPSO Free Acid</td>
<td>980 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>EDTA, disodium</td>
<td>&gt; 2,000 mg/kg (Oral – Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>TBHBA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Polyethylene glycol, 8000</td>
<td>&gt; 50000 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Polyethylene Glycol 2000</td>
<td>&gt; 50000 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>MOPS</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Tris (hydroxymethyl) amino methane</td>
<td>5900 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>EDTA, tetrasodium salt</td>
<td>&lt; 1,260 mg/kg (Oral – Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Polyethylene glycol, 3400</td>
<td>&gt; 50,000 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

<sup>(CMR)<sup>1</sup> – Refers to carcinogenicity, mutagenicity, and reproductive hazards.
XII. Ecological Information

No information found. This preparation is very soluble in water, and is not anticipated to present adverse ecotoxicological effects.

XIII. Disposal Considerations

- Waste Treatment Methods: Check regional waste requirements
- Waste Treatment Options: Treatment options approved by local authorities
- Sewage Disposal Options: Check with local authorities before discharge to the sewer
- Other Disposal Recommendations: Dispose of according to local, state, and national regulatory requirements
- U.S. Waste Classification: Non-RCRA Waste
- California Waste Codes: H132

XIV. Transport Information

Follow federal and local regulations.

- DOT and IATA Shipping Information: Not regulated as a dangerous good
- ADR Information: Not Applicable
- IMDG: Not a dangerous good

XV. Regulatory Information

- US OSHA: Not regulated as a hazardous material
- US EPA: Hazards to the environment have not been thoroughly investigated
- EU Regulations: This material safety data sheet conforms to Regulation (EC) No 1272/2008, 1907/2006, and other requirements established by the European Union
- National Regulations: Germany: Water Hazard Class I
- Chemical Safety Assessment: A Chemical Safety Assessment has not been completed for this product

XVI. Other Information
The above information is believed to be correct but does not purport to be inclusive and shall be used only as a guide. Abaxis shall not be held liable for any damage resulting from handling or from contact with the above product.