MATERIAL SAFETY DATA SHEET (MSDS)/SAFETY DATA SHEET (SDS)
Avian / Reptilian Profile Plus

I. Product and Company Identification

Product Name: VetScan® Reagent Disc – Avian / Reptilian Profile Plus
A point of care blood diagnostic product

Part Numbers: 500-1041 (single); 500-0041-12 (12 Pack)

Company Information: Abaxis, Inc. Abaxis Europe GmbH
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Emergency Number: +1-800-822-2947 (US)

II. Hazard Identification

OSHA Hazards: No known OSHA hazards

GHS Hazards: Not a dangerous or hazardous substance or preparation according to the Global Harmonized System (GHS).

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 chemical 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>
<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>19.1</td>
<td>69-65-8</td>
<td>200-711-8</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>Polyethylene Glycol, 8000</td>
<td>9.3</td>
<td>25322-68-3</td>
<td>500-038-2</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>Polyethylene glycol 2000</td>
<td>7.2</td>
<td>9004-74-4</td>
<td>215-801-2</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>Polyethylene Glycol, 3400</td>
<td>6.4</td>
<td>25322-68-3</td>
<td>500-038-2</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>Dextran, 70 USP</td>
<td>6.4</td>
<td>9004-54-0</td>
<td>232-677-5</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>L-Aspartic Acid</td>
<td>2.8</td>
<td>56-84-8</td>
<td>200-291-6</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>2.6</td>
<td>7647-14-5</td>
<td>231-598-3</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>Lithium hydroxide</td>
<td>2.4</td>
<td>1310-65-2</td>
<td>270-438-7</td>
<td>Skin Irr. 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>Tris(hydroxymethyl)amino methane</td>
<td>6.0</td>
<td>77-86-1</td>
<td>201-064-4</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>Heparin, Lithium</td>
<td>1.4</td>
<td>9045-22-1</td>
<td>Unlisted</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>Cupric Sulfate Pentahydrate</td>
<td>1.4</td>
<td>7758-99-8</td>
<td>231-847-6</td>
<td>Skin Irr. 2</td>
</tr>
<tr>
<td>MOPS (free acid)</td>
<td>1.3</td>
<td>1132-61-2</td>
<td>214-478-5</td>
<td>Skin Irr. 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 Protections:** Avoid breathing mists, dusts, and aerosols
  - **Environmental Controls:** Prevent spilled product from entering drains
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**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 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 LD$<em>{50}$/ LC$</em>{50}$</th>
<th>CHRONIC TOXICITY (CMR) $^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>D- Mannitol</td>
<td>13,500 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Polyethylene glycol 8000</td>
<td>&gt; 50,000 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Polyethylene glycol, 2000</td>
<td>&gt; 50,000 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>
<tr>
<td>L-Aspartic Acid</td>
<td>5,000 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>3000 mg/kg (Oral, Rat)</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>Dextran 70</td>
<td>10,700 mg/kg (scu, Rat)</td>
<td>Reproductive effects to women at high doses</td>
</tr>
<tr>
<td>MOPS (free acid)</td>
<td>&gt;2,000 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Myo-Inositol</td>
<td>10,000 mg/kg (Oral, Mse)</td>
<td>No data available</td>
</tr>
<tr>
<td>Lithium Hydroxide</td>
<td>368 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Heparin, Lithium (a)</td>
<td>1950 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Cupric Sulfate Pentahydrate</td>
<td>300 mg/kg (Oral, Rat)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

(CMR)$^1$ – 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

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

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.