MATERIALS SAFETY DATA SHEET

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Date Prepared: 6/21/93  
Date Revised: 4/18/01  
MSDS No.: LC001

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LeadCheck Swabs  
Product Numbers: PB-2CM2, PB-2M8, PB-2M8I, PB-2M16, PB-2M16I, PB-2M96  
General Use: Field test for Lead ion (Pb⁺⁺).  
Product Description: Each swab looks like a cigarette in size and shape, with a fiber tip at one end. Inside the barrel of the LeadCheck Swab are two sealed glass ampoules. One contains the lead reactive dye and the other the acidic wetting solution.

MANUFACTURER:  
HybriVet Systems, Inc.  
17 Erie Drive  
Natick, MA 01760

800-262-5323 Information Hot Line; M-F, 8:30 am to 5:00 pm.
Name of Preparer: Meredith M. Hunter

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

None of the chemicals listed below is present in amounts that exceed 1% by weight of the LeadCheck Swab. Therefore, technically, HybriVet Systems, Inc. is not required to provide an MSDS for this product. However, as a courtesy to our customers we are providing the following information in the format of an MSDS.

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>KNOWN HAZARD</th>
<th>WT%</th>
<th>CAS Registry #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead reactive dye</td>
<td>Unknown</td>
<td>&lt;1%</td>
<td>Trade secret</td>
</tr>
<tr>
<td>Inert filer</td>
<td>Irritant (dust)</td>
<td>&lt;1%</td>
<td>Trade secret</td>
</tr>
<tr>
<td>Tartaric Acid</td>
<td>Irritant</td>
<td>&lt;1%</td>
<td>87-69-4</td>
</tr>
<tr>
<td>Sodium Tartrate</td>
<td>Irritant</td>
<td>&lt;1%</td>
<td>6106-24-7</td>
</tr>
</tbody>
</table>
SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Each LeadCheck Swabs look like a cigarette in size and shape. One end contains a fiber tip. Inside the cardboard wrapped plastic barrel of the Swab are two sealed glass ampoules. One is filled with the lead reactive dye and the inert filler. The second ample is filled with a tartrate wetting solution, pH 2.9. This tartrate buffer may cause a slight irritation to the eye or skin on contact. While the filler dust is classified as a respiratory irritant, the small amount present in LeadCheck Swabs is contained within the ample inside the barrel of the Swab. Should the ample be accidentally crushed during storage or transportation, the filler dust would remain contained within the Swab barrel. During the activation process, the wetting solution also wets the filler which remains contained inside the barrel of the Swab. Therefore, under normal use of this product, the user is not exposed to filler dust particles.

POTENTIAL HEALTH EFFECTS: To the best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated for the lead reactive dye, tartaric acid and inert filler.

INHALATION: May be harmful. Filler dust and tartaric acid are irritating to mucous membranes and upper respiratory tract.
EYE CONTACT: May cause eye irritation.
SKIN CONTACT: May cause moderate skin irritation or may be harmful if absorbed.
INGESTION: May be harmful if ingested.
CHRONIC: May be harmful upon chronic exposure.

SECTION 4. FIRST AID MEASURES

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and call physician.

EYE CONTACT: In case of contact, immediately flush eyes with large amounts of water for a least 15 minutes.

SKIN CONTACT: In case of contact, immediately wash skin with soap and large amounts of water.

INGESTION: If swallowed and the person is conscious, immediately wash mouth out with large amounts of water. Get medical attention.

NOTE: Wash contaminated clothing before reuse.

SECTION 5. FIRE FIGHTING MEASURES

Flashpoint and Method: N/A
Flammable Limits: N/A
Autoignition Temperature: Not available for lead reactive dye; 797°F for Tartaric acid (powder form).

GENERAL HAZARD: No special precautions need be taken.
FIRE FIGHTING INSTRUCTIONS:
Extinguishing media - water spray, carbon dioxide, dry chemical powder, alcohol or polymer foam or other extinguishing media appropriate for surrounding fire.

FIRE FIGHTING EQUIPMENT: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

HAZARDOUS COMBUSTION PRODUCTS: Large quantities of the product may emit toxic fumes of carbon monoxide, carbon dioxide.

SECTION 6. ACCIDENTAL RELEASE MEASURES
LAND SPILL: In the case where a large quantity of LeadCheck Swabs (several case lots) have been spilled and crushed, wear suitable protective clothing, chemical safety goggles, rubber boots and heavy rubber gloves. Carefully sweep up the debris and place in a bag for disposal. Avoid raising dust. Ventilate area and wash spill site after material pick-up is complete.

WATER SPILL: Should a large quantity of LeadCheck Swabs be accidentally dumped into a large body of water, simply recover the Swabs and dispose appropriately. Observe all federal, state and local environmental regulations.

SECTION 7. HANDLING AND STORAGE
STORAGE TEMPERATURE: Ambient
STORAGE PRESSURE: Atmospheric

GENERAL: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after handling or wear protective gloves. Keep kits tightly closed and store in a cool dry place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
ENGINEERING CONTROLS: Use in a well-ventilated area.

PERSONAL PROTECTION:
RESPIRATOR: Not necessary when using individual LeadCheck Swabs.

PROTECTIVE CLOTHING: No specialized clothing required.
EXPOSURE GUIDELINES: Avoid prolonged exposure
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

A. Lead reactive dye
Physical State: solid
Appearance: dark green powder
Odor: none
pH: N/A
Freezing Point: N/A
Solubility in water: moderate
Vapor Pressure: N/A (Air = 1)
Evaporation Rate: N/A (n-Butyl Acetate = 1)
Melting Point: >300°C

B. Inert filler
Physical State: solid
Appearance: white powder
Odor: none
pH: N/A
Freezing Point: N/A
Solubility in water: insoluble
Vapor Pressure: N/A (Air = 1)
Evaporation Rate: N/A (n-Butyl Acetate = 1)
Melting Point: >300°C
Specific Gravity: 3.970

C. Tartrate Buffer
Physical State: liquid
Appearance: clear
Odor: none
Viscosity: 1.0
Vapor Pressure: N/A (Air = 1)
Evaporation Rate: N/A pH: 2.9 (n-Butyl Acetate = 1)

SECTION 10. STABILITY AND REACTIVITY

GENERAL: The reagents as packaged LeadCheck Swabs are stable. Hazardous polymerization will not occur for any of the reagents listed.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:
Strong oxidizing agents, bases, reducing agents.

HAZARDOUS DECOMPOSITION: Toxic fumes of carbon monoxide and carbon dioxide can form on

SECTION 11. TOXICOLOGICAL INFORMATION

To the best of our knowledge, the toxicological properties of the lead reactive dye, inert filler and tartaric acid have not been thoroughly investigated. Some of the available toxicological data for these chemicals are listed below.

For Tartaric Acid: IVN-MUS LD50 = 485 mg/Kg

SECTION 12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of these materials on the environment.
SECTION 13. DISPOSAL CONSIDERATIONS

Individual LeadCheck Swabs may be disposed of as non-hazardous waste.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation): Not a hazardous material for DOT shipping.
PROPER SHIPPING NAME: LeadCheck Swabs
HAZARD CLASS: N/A
IDENTIFICATION NUMBER: N/A

SECTION 15. REGULATORY INFORMATION

TSCA (Toxic Substance Control Act):
Components of this product are listed on the TSCA Inventory.

CERCLA (Comprehensive Response Compensation, and Liability Act): This product contains no Reportable Quantity (RQ) Substances. We recommend you contact local authorities to determine if there may be other local reporting requirements.

SARA TITLE III (Superfund Amendments and Reauthorization Act):
311/312 Hazard Categories: The components of this product have been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and this product is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category.

313 Reportable Ingredients: None.

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking California to cause cancer or reproductive toxicity.

SECTION 16. OTHER INFORMATION

No specific notes.

REVISION SUMMARY: Section 15 was revised March 25, 1997. Section 1 was revised April 2, 1998 to remove one of the 800 numbers. Document was reviewed on April 18, 2001 but no changes were made.

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL-INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. HYBRIVET SYSTEMS SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

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