1. IDENTIFICATION OF THE SUBSTANCE/PREPARATIONS AND OF THE COMPANY UNDERTAKING

Product Name: DERMACOOL® Spray with Lidocaine
Product Description: Topical anesthetic for dogs, cats, and horses
Manufacturer/Supplier: Virbac AH, Inc.
Address: P.O. Box 162059
         Fort Worth, Texas 76161
Phone Number: (800) 338-3659 for Technical Support
Chemtrec Number (24 hour): (800) 424-9300
Emergency Number: (800) 338-3659 for Human and Animal Medical Emergencies
MSDS Revision Date: March 3, 2011
Supersedes MSDS Dated: March 3, 2009

Material Safety Data Sheet in compliance with OSHA’s Hazcom Standard (29 CFR 1910.1200)

2. HAZARDS IDENTIFICATION

Emergency Overview

CAUTION!
Avoid contact with eyes and mucous membranes.
Avoid breathing spray, mist or vapors.
Harmful if swallowed.
Keep out of reach of children.
Read entire label before each use.

Routes of Entry
Eye contact - Skin contact - Ingestion - Inhalation

Carcinogenic Status
Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs
Eyes - Skin - Respiratory System - Central Nervous System - Kidneys - Heart

Health Effects - Eyes
Contact with eyes can cause irritation.

Health Effects - Skin
Contact with skin may cause irritation.

Health Effects - Ingestion
Harmful if swallowed. Ingestion of this material may cause gastrointestinal effects such as nausea, vomiting and diarrhea. Repeated exposure may cause adverse effects to kidneys, heart, and central nervous system.

Health Effects - Inhalation
Prolonged, repeated inhalation of spray, mist or vapors may cause respiratory irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>35 - 45%</td>
</tr>
<tr>
<td>Glycerin</td>
<td>56-81-5</td>
<td>1 - 10%</td>
</tr>
</tbody>
</table>
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactic Acid</td>
<td>79-33-4</td>
<td>0.1 – &lt;1.0%</td>
</tr>
<tr>
<td>Lidocaine Hydrochloride</td>
<td>73-78-9</td>
<td>1.5 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Eyes**
Immediately flood the eye with plenty of water for at least 15-20 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Skin**
If irritation develops wash skin thoroughly with soap and water. Obtain medical attention if redness or soreness persists.

**Ingestion**
Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Inhalation**
Remove person to fresh air. Seek medical attention if symptoms persist.

**Advice to Physicians**
Treat symptomatically.

5. FIRE - FIGHTING MEASURES

**Extinguishing Media**
Use extinguishing media appropriate for surrounding materials.

**Unusual Fire and Explosion Hazards**
Can release hazardous vapors during a fire.

**Protective Equipment for Fire-Fighting**
Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective clothing. Wipe up and transfer into suitable containers for recovery or disposal. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

Store in original container in a cool, dry place. Store away from children and pets. Do not store near foodstuffs. Do not contaminate water, food or feed by storage. Wear appropriate protective clothing. Avoid contact with eyes. Wash hands thoroughly after handling and before eating, drinking or smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Standards**
Exposure limits are listed below, if they exist.

**Glycerin (Mist)**
ACGIH: TLV 10 mg/m³ 8h TWA.
OSHA: PEL 5 mg/m³ 8h TWA respirable fraction
15mg/m³ 8h TWA total dust
8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Propylene Glycol**
None established

**Lidocaine HCL**
None established

**Lactic Acid**
None established

**Engineering Control Measures**
No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.

**Respiratory Protection**
Not required under normal conditions of use. Professional groomers and those with repeated and extended exposures should consider the use of respiratory protection if there is a risk of exposure to high vapor concentrations or aerosols. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

**Hand Protection**
Chemical resistant gloves.

**Eye Protection**
Safety glasses or goggles.

**Body Protection**
Waterproof apron.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Clear to light blue</td>
</tr>
<tr>
<td>Odor</td>
<td>Menthol</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.04</td>
</tr>
<tr>
<td>Boiling Range/Point (°C/F)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point (°C/F)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point (PMCC) (°C/F)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Explosion Limits (%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. **STABILITY AND REACTIVITY**

**Stability**
Stable under normal conditions.

**Conditions to Avoid**
Heat - high temperatures

**Materials to Avoid**
Strong oxidizers - strong acids - bases

**Hazardous Polymerization**
Will not occur.

**Hazardous Decomposition Products**
Oxides of carbon - organic compounds - nitrogen oxides - halogenated compounds
11. TOXICOLOGICAL INFORMATION

See product packaging for additional information.

**Acute Toxicity**
- Propylene Glycol: Oral LD50 (rat) 22,000 mg/kg
- Lidocaine HCL: Oral LD50 (mouse) 292 mg/kg
- Lactic acid: LD50 Rat oral 3730 mg/kg, LC50 Rat inhalation 7.94 mg/L/4 hr
- Glycerin: Oral LD50 9 Rat) 12,600 mg/kg

**Specific Target Organ Systemic Toxicity (single and repeat)**
- Propylene Glycol: In animal studies propylene glycol has been shown to cause kidney damage.
- Lidocaine HCL: Prolonged or repeated exposure may lead to damage to the liver, lungs, cardiovascular and central nervous system.

**Serious Eye damage/Eye Irritation**
- Propylene Glycol: Mild eye irritation (rabbit)
- Lactic acid: Severe eye irritation (rabbit - Draize Test)
- Glycerin: Animal studies have shown glycerin to be not irritating or slightly irritating to eyes.

**Skin Corrosion/Irritation**
- Propylene Glycol: Mild skin irritation (human, 7d)
- Glycerin: Human skin tests have shown glycerin to be slightly irritating.
- Lactic acid: Skin irritant (rabbit 24 h Draize Test)

**Respiratory or Skin Sensitization**
- Lidocaine HCL: Workers allergic to amide type anesthetics should avoid exposure.

**Carcinogenicity**
- Not considered carcinogenic by NTP, IARC, and OSHA.

**Germ Cell Mutagenicity**
- No relevant studies identified.

**Toxicity to Reproduction**
- Lactic acid: A reproductive toxicity study in mice (oral) showed maternal effects and developmental abnormalities to the fetal musculoskeletal system.

12. ECOLOGICAL INFORMATION

**Mobility**
- No relevant studies identified.

**Persistence/Degradability**
- No relevant studies identified.

**Bio-accumulation**
- No relevant studies identified.

**Ecotoxicity**
- Propylene Glycol: EC50 Daphnia magna > 10,000 mg/l 48 h
- Lactic acid: EC50 Daphnia magna (Water flea) 180 - 320 mg/l 48 h

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

- **DOT CFR 172.101 Data**: Not Regulated
- **UN Proper Shipping Name**: Not Regulated
- **UN Class**: None.
- **UN Number**: None.
- **UN Packaging Group**: None.
- **Classification for AIR**: Consult current IATA Regulations prior to shipping by air.

Revision Date: March 3, 2011
15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TSCA Listing</strong></td>
</tr>
<tr>
<td><strong>DSL (Canadian) Listing</strong></td>
</tr>
<tr>
<td><strong>WHMIS Classification</strong></td>
</tr>
<tr>
<td></td>
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<tr>
<td><strong>MA Right To Know Law</strong></td>
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<tr>
<td><strong>PA Right To Know Law</strong></td>
</tr>
<tr>
<td><strong>NJ Right To Know Law</strong></td>
</tr>
<tr>
<td><strong>California Proposition 65</strong></td>
</tr>
<tr>
<td><strong>SARA Title III Sect. 311/312 Categorization</strong></td>
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<tr>
<td><strong>SARA Title III Sect. 313</strong></td>
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16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Ratings</th>
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</tr>
</thead>
<tbody>
<tr>
<td>NFPA Code for Flammability - 0</td>
<td></td>
</tr>
<tr>
<td>NFPA Code for Health - 1</td>
<td></td>
</tr>
<tr>
<td>NFPA Code for Reactivity - 0</td>
<td></td>
</tr>
<tr>
<td>NFPA Code for Special Hazards – 0</td>
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</tr>
<tr>
<td><strong>HMIS Ratings</strong></td>
<td></td>
</tr>
<tr>
<td>HMIS Code for Flammability - 0</td>
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</tr>
<tr>
<td>HMIS Code for Health – 1*</td>
<td></td>
</tr>
<tr>
<td>HMIS Code for Reactivity - 0</td>
<td></td>
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<tr>
<td>HMIS Code for Personal Protection - See Section 8</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Abbreviations</th>
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<tbody>
<tr>
<td>ACGIH: American Conference of Governmental Industrial Hygienists</td>
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<tr>
<td>BOD: Biological Oxygen Demand</td>
<td></td>
</tr>
<tr>
<td>CAS#: Chemical Abstracts Service Number</td>
<td></td>
</tr>
<tr>
<td>FIFRA: Federal Insecticide, Fungicide and Rodenticide Act</td>
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<tr>
<td>IARC: International Agency for Research on Cancer</td>
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</tbody>
</table>
16. OTHER INFORMATION

Abbreviations
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
N/A: Denotes no applicable information found or available
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act

For further Information call: (800) 338-3659

Prepared By: EnviroNet LLC

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