Material Safety Data Sheet
May be used to comply with OSHA’s Hazard Communication Standard, 29 CFR 1910:1200. Standard must be consulted for specific requirements

The information contained herein is based on data considered accurate. However, no warranty of any nature is either expressed or implied with respect to the product or the data contained herein.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

Identity (as Used on Label and List)
ACIDIFIED COPPER SULFATE

Section I
Manufacturer’s Name
Animal Science Products, Inc.

Address (Number, Street)
PO Box 631408

(City)
Nacogdoches

(State)
TX

Date Prepared
11/02/2011

Signature of Preparer (Optional)

Section II - Hazardous Ingredients/Identity Information
COPPER SULFATE PENTAHYDRATE CAS 7758-99-8
CITRIC ACID ANHYDROUS CAS 77-92-9

Section III – Physical/Chemical Characteristics
Boiling Point:
NA

Specific Gravity (H2O=1):
NA

Vapor Pressure (mm Hg.):
NA

Melting Point
NA

Vapor Density (AIR=1):
NA

Evaporating Rate (Butyl Acetate=1)
NA

Solubility in Water:
Appreciable

Appearance and Odor:
Blue powder

Section IV – Fire and Explosion Hazard Data
Flash Point (Method Used):
NA not flammable

Flammable Limits:
NA

LEL:
NA

UEL:
NA

Extinguishing Media:
Does not support combustion, use media appropriate for surrounding environment.

Special Fire Fighting Procedures:
Heating over 300 C emits toxic sulfur fumes. Extinguishing with water will dissolve copper sulfate and runoff should be kept out of watershed.

Unusual Fire and Explosion Hazard:
None
**Section V – Reactivity Data**

<table>
<thead>
<tr>
<th>Stability</th>
<th>Unstable</th>
<th>Stable</th>
<th>XX</th>
<th>Conditions to Avoid: Incompatible with bases, hypochlorites, and ammonium compounds.</th>
</tr>
</thead>
</table>

Compatibility (Materials to Avoid):

<table>
<thead>
<tr>
<th>Hazardous Polymerization</th>
<th>May Occur</th>
<th>Conditions to Avoid:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will Not Occur</td>
<td>XX</td>
<td></td>
</tr>
</tbody>
</table>

**Section VI – Health Hazard Data**

<table>
<thead>
<tr>
<th>Route(s) of Entry:</th>
<th>Inhalation? YES</th>
<th>Skin? YES</th>
<th>Eyes? YES</th>
<th>Ingestion? YES</th>
</tr>
</thead>
</table>

Effects of Overexposure:

- Swallowing: Orally toxic, LD50 of copper sulfate in male rats 472 mg/kg
- Skin: Non toxic, skin irritation is possible, especially when wet
- Eyes: Irritating and corrosive. Corneal burns are possible if not treated. Blindness may result.
- Inhalation: Irritating to the upper respiratory tract

Carcinogenicity: None

First Aid Procedures:

- If swallowed: Give large amounts of milk or water. Induce vomiting. Seek medical attention.
- If on skin: Wash thoroughly with soap and water. Remove and wash contaminated clothing.
- If in eyes: Immediately flush eyes with plenty of water for 15 minutes. Hold eyelids apart during irrigation. Seek medical attention.
- If inhaled: Remove person to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult give oxygen. Seek medical attention.

Preexisting Conditions that may be Aggravated by Exposure:

- Skin lacerations and irritation can become more irritated.

**Section VII – Precautions for Safe Handling and Use**

Steps to be taken in case material is released or spilled:

- Do not wash away powder. Recover dry if possible. If product is in a confined solution, react with soda ash to form insoluble copper carbonate that can be scooped up.

Waste Disposal Method:

- Do not reuse container. Comply with federal, state and local regulations. Sweep up powder and dispose in an approved landfill.

Safe Handling Procedures:

- Contact lenses should not be worn. Wear chemical safety goggles. Rubber gloves and rubber apron should be worn.
- Wear an approved respirator for dust and mist.
- Provide mechanical ventilation or local exhaust.

**Section VIII – Control Measures**

Respiratory Protection:

- NIOSH respirator prefix TC-21C or filters designated with R, P, or HE.

Protective Gloves:

- Wear rubber gloves

Eye Protection:

- Wear safety goggles, full face shield or full face respirator.

Other Clothing or Equipment:

- Rubber apron should be worn