MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF PRODUCT AND COMPANY

Phibro Animal Health
65 Challenger Road
Ridgefield Park, NJ 07660

Emergency telephone: 1-800-345-4735
Hours of operation: 24 Hours

Product information: 1-888-475-7355
Hours of operation: M-F 9 a.m. - 5 p.m. Eastern Time

Trade names
NEO-TERRAMYCIN® 50/50, 100/50, 100/100, 50/50D, 100/50D & 100/100D type A medicated article

Chemical family
Tetracycline derivative / Aminoglycoside

Therapeutic use
Antibiotic agent

Description
Uniform tan meal with a cereal odor

SECTION 2 - COMPOSITION

 Ingredient | CAS Number | Amount  
------------|------------|---------
 Neomycin sulfate | 1405-10-3 | <35%  
 Oxytetracycline | 79-57-2 | <25%  
 Inert Material | | Proprietary

SECTION 3 - HAZARDS IDENTIFICATION

Signal word
CAUTION!

Statements of hazard
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE LIVER AND KIDNEY EFFECTS.
MAY CAUSE OTOTOXICITY (HARMFUL EFFECTS ON THE EAR).
INFANTS OF MOTHERS EXPOSED DURING PREGNANCY MAY DEVELOP DISCOLORATION OF THE TEETH.

Eye effects
May cause eye irritation.

Skin effects
May cause skin irritation. May cause allergic skin reaction. Exposure to sunlight following contact may result in skin reactions in rare instances. Repeated or prolonged contact may cause dermatitis of the hands and wrists.

Inhalation effects
An Occupational Exposure Limit has been established for one or more of the ingredients (see Section 8).
SECTION 6 - ACCIDENTAL RELEASE MEASURES

General            Review Sections 3, 8 and 12 before proceeding with clean up.
Small spill        Sweep material into appropriate recovery container or into a labeled
                   container for disposal. Clean spill area thoroughly with detergent and
                   water. Avoid creating airborne dust.
Large spill        Sweep material into appropriate recovery container. Close container and
                   move it to a secure holding area. Clean spill area thoroughly with
detergent and water. Avoid creating airborne dust.

SECTION 7 - HANDLING AND STORAGE

General handling   Minimize dust generation and accumulation. Do not expose to ignition
                   sources. Ground and bond all bulk transfer equipment. Keep away from
                   heat. Use only in a well-ventilated area. Avoid contact with eyes, skin
                   and clothing. Avoid breathing dust.
Storage conditions  Keep container tightly closed when not in use. Store out of direct sunlight
                   in a well ventilated area at room temperature.

SECTION 8 - EXPOSURE CONTROLS/PERSOAL PROTECTION

Exposure limits

<table>
<thead>
<tr>
<th>Compound</th>
<th>Issuer</th>
<th>Type</th>
<th>OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxytetracycline</td>
<td>Phibro</td>
<td>TWA-8</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td>Neomycin sulfate</td>
<td>Phibro</td>
<td>TWA-8</td>
<td>Not established</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>ACGIH</td>
<td>TWA-8 HR</td>
<td>10 mg/m³ (particulate)</td>
</tr>
<tr>
<td>Mineral oil, white</td>
<td>ACGIH</td>
<td>STEL (15 min)</td>
<td>10 mg/m³ (Oil Mist, mineral)</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>TWA-8 HR</td>
<td>5 mg/m³ (Oil Mist, mineral)</td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>TWA-8 HR</td>
<td>5 mg/m³ (mist)</td>
</tr>
</tbody>
</table>

Measurement method

Oxytetracycline: CMA-KAS-99-003 (contact Phibro Animal Health for additional details)

Ventilation

Keep airborne contamination levels below the exposure limits listed above
in this section. Good general ventilation should be sufficient to control
airborne levels. Do not use in confined space.

Respiratory protection

In dusty conditions use an approved dust mask or more protection as
needed. If the applicable Occupational Exposure Limit (OEL) is exceeded,
wear an appropriate respirator with a protection factor sufficient to control
exposures to below the OEL.

Eye protection

Wear safety glasses with sideshields if airborne dust is present.
SECTION 11 - TOXICOLOGY INFORMATION

Toxicology summary
The information included in this section describes the potential hazards of various forms of the active ingredient.

Acute toxicity

<table>
<thead>
<tr>
<th>Compound</th>
<th>Type</th>
<th>Route</th>
<th>Species</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neomycin sulfate</td>
<td>LD₅₀</td>
<td>Oral</td>
<td>Rat</td>
<td>2750 mg/kg</td>
</tr>
<tr>
<td>Neomycin sulfate</td>
<td>LD₅₀</td>
<td>Oral</td>
<td>Mice</td>
<td>&gt; 8 g/kg</td>
</tr>
<tr>
<td>Oxytetracycline</td>
<td>LD₅₀</td>
<td>Oral</td>
<td>Rat</td>
<td>4800 mg/kg</td>
</tr>
<tr>
<td>Oxytetracycline</td>
<td>LD₅₀</td>
<td>Oral</td>
<td>Mice</td>
<td>2240 mg/kg</td>
</tr>
</tbody>
</table>

Eye
Tetracyclines are known to cause local irritation upon intramuscular and intravenous administration. The potential for irritation should be considered.

Skin
Tetracyclines are known to cause local irritation upon intramuscular and intravenous administration. The potential for irritation should be considered.

Inhalation
Tetracyclines are known to cause local irritation upon intramuscular and intravenous administration. The potential for irritation should be considered.

Ingestion
See table above

Mutagenicity
Oxytetracycline was not mutagenic in microbial cell assays, but was weakly positive in in vitro mammalian cells. Overall, it was judged not to be genotoxic.

Neomycin was positive in in vitro mammalian cell assays; however these results are suspected to be secondary to chemical alteration of proteins.

Sensitization
Skin sensitization and/or photosensitization (allergic response after UV exposure) have been demonstrated with clinical usage of oxytetracycline and neomycin sulfate.

Subchronic effects
Studies of oxytetracycline hydrochloride at doses up to 100,000 ppm in feed in mice and rats for 14 days and 13 weeks were unremarkable with the exception of slight fatty infiltration observed in the liver of all male rats.

Repeated parenteral administration of neomycin over periods of 5 days to 4 months in rodents, dogs, and guinea pigs resulted in kidney damage. Deafness was observed in guinea pigs treated subcutaneously with 100 mg/kg/day neomycin.
SECTION 12 - ECOLOGICAL INFORMATION

Environmental overview  The environmental characteristics of this material have not been fully evaluated. Releases to the environment should be avoided. See aquatic toxicity data, below:

Aquatic toxicity  

<table>
<thead>
<tr>
<th>Compound</th>
<th>Type</th>
<th>Species</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxytetracycline</td>
<td>LC50/96h</td>
<td>Lake trout</td>
<td>&lt; 200 mg/L</td>
</tr>
</tbody>
</table>

SECTION 13 - DISPOSAL INFORMATION

Disposal procedure  Incineration is the recommended method of disposal for this material. Observe all local and national regulations when disposing of this mixture.

SECTION 14 - TRANSPORTATION INFORMATION

General shipping instructions  Not regulated for transport under USDOT, IATA, or IMDG regulations.

SECTION 15 - REGULATORY INFORMATION

TSCA status  Not listed
SARA section 302  No
SARA section 313  No
California Proposition 65  THIS PRODUCT IS OR CONTAINS CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE DEVELOPMENTAL TOXICITY.

Canadian WHMIS  This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16 - OTHER

Disclaimer  Phibro Animal Health believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without a warranty of any kind, expressed or implied.