

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMMON NAME: LINCOMIX®

SYNONYMS: LINCOMIX 20, LINCOMIX 50 Feed Medication

USE: Veterinary product for the treatment and control of swine dysentery, for reduction in severity of swine mycoplasmal pneumonia, and for the improvement of rate of gain in growing-finishing swine. Not for human use.

MANUFACTURER/SUPPLIER:

PHARMACIA & UPJOHN
7171 PORTAGE RD
KALAMAZOO, MI 49001-0199

TELEPHONE NUMBERS:

(616) 833-5122 - (24 Hours, Emergency)
(616) 833-7555 - (8:00 AM - 4:30 PM, EST Emergency)
(800) 253-8600 - (8:00 AM - 4:30 PM, EST)

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT 1

COMMON NAME: Soybean Mill Feed.
% BY WEIGHT: 83% to 96.5%
EXPOSURE LIMIT(S): Not established.

INGREDIENT 2

COMMON NAME: Lincomycin Hydrochloride.
% BY WEIGHT: 3% to 15%
CAS NUMBER: 859-18-7
EXPOSURE LIMIT(S): PHARMACIA & UPJOHN
EXPOSURE LIMIT-TWA: 0.1 mg/m³

INGREDIENT 3

COMMON NAME: Mineral Oil.
% BY WEIGHT: 0.5% to 2%
CAS NUMBER: 8012-95-1
EXPOSURE LIMIT(S): OSHA PEL-TWA: 5 mg/m³
ACGIH TLV-TWA: 5 mg/m³
ACGIH TLV-STEL: 10 mg/m³

EXPOSURE LIMIT(S) FOR THE MATERIAL: Not established.

3. HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF EXPOSURE: Skin contact, eye contact, inhalation, and ingestion.

EFFECTS OF OVEREXPOSURE: Repeated overexposure may cause abdominal cramps, diarrhea and colitis. May begin several weeks after exposure has ceased. May cause skin and/or eye irritation. Inhalation may cause irritation or allergic reaction. Ingestion may lead to gastrointestinal effects.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Hypersensitivity to lincomycin or clindamycin.

4. FIRST AID MEASURES

EYES: Flush with water for 15 minutes. Hold eyelids open to assure complete contact with water.

SKIN: Wash with soap and water. Remove contaminated clothing.

INHALATION: Remove from exposure.

INGESTION: Contact a physician or poison control center.

NOTES TO PHYSICIAN: Lincomycin has been shown to have neuromuscular-blocking properties that may enhance the action of other neuromuscular-blocking agents. If an allergic reaction should occur, the usual agents (epinephrine, corticosteroids, antihistamines) should be used as indicated.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable (solid).

LOWER EXPLOSION LIMIT (LEL): Not applicable.

UPPER EXPLOSION LIMIT (UEL): Not applicable.

EXTINGUISHING MEDIA: Water, carbon dioxide or dry chemical.

FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and full-body protective equipment.

UNUSUAL FIRE OR EXPLOSION HAZARDS: As with all finely divided organic powders, it is advisable to eliminate explosion hazards by methods such as grounding mechanical equipment in contact with the material to prevent the buildup of static electricity, inerting the atmosphere or controlling dust levels.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide. Carbon dioxide. Nitrogen oxides. Sulfur oxides. Hydrochloric acid.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS

RELEASED OR SPILLED: Remove ignition sources; control the generation of dust/vapors; provide ventilation and respiratory, skin and eye protection to prevent over-exposure. Keep out of drains; prevent entry to surface water, groundwater and soil. Vacuum (with HEPA-filtered and explosion-proof equipment) or scoop spilled material and place in container.

7. HANDLING AND STORAGE

PRECAUTIONS FOR HANDLING AND STORAGE:

Avoid generating dust/vapors and contact with skin, eyes and clothing. Use with adequate ventilation. Wash

thoroughly after handling. Launder contaminated clothing before reuse. Store at room temperature. Do not get in eyes, on skin or clothing. Avoid breathing dust or mist. Use adequate dust/vapor control. Keep out of reach of children.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

RESPIRATORY PROTECTION: Not required.
VENTILATION: Local exhaust.
PROTECTIVE GLOVES: Not required.
EYE PROTECTION: Not required.
OTHER PROTECTIVE EQUIPMENT: Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Coarse, light-tan powder.
MOLECULAR WEIGHT: Mixture.
ODOR: Slight fermentation or milled grain odor.
SOLUBILITY IN WATER: Soybean mill feed, not soluble; lincomycin hydrochloride, freely soluble.

10. STABILITY AND REACTIVITY

STABILITY: Stable.
PHYSICAL CONDITIONS TO AVOID: None.
INCOMPATIBILITY WITH OTHER MATERIALS: None.
HAZARDOUS DECOMPOSITION PRODUCTS: None.
HAZARDOUS POLYMERIZATION: Does not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE STUDIES: The following data applies to the active ingredient, lincomycin hydrochloride.
SENSITIZATION: May cause hypersensitivity reactions.
INTRAVENOUS LD50 (RAT): 342 mg/kg
INTRAVENOUS LD50 (MOUSE): 214 mg/kg
ORAL LD50 (RAT): >4,000 mg/kg
INTRAPERITONEAL LD50 (MOUSE): 1,000 mg/kg
SUBCUTANEOUS LD50 (RAT): 9,778 mg/kg
OTHER STUDIES:
GENOTOXICITY: Negative.
TERATOGENICITY: No teratogenic effects seen in rats or dogs.
CARCINOGENICITY: Ingredient(s) are not listed as carcinogenic by IARC, NTP, or OSHA.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

MOBILITY: Lincomycin hydrochloride melts with decomposition at 148°C. It has no measurable vapor pressure; therefore, it is not expected to enter the air. Lincomycin hydrochloride is very soluble in water (500 to 1,000 mg/mL) and undergoes hydrolysis at both acid and basic pHs at elevated temperatures. Lincomycin can be sorbed to soil, but it is readily leached away from soils. Lincomycin is expected to be relatively mobile and migrate toward the aquatic compartment.

PERSISTENCE/DEGRADABILITY: Lincomycin hydrochloride can undergo hydrolysis at both acid and basic pHs at elevated temperatures; however, in the pH range 3 to 6 at room temperature, degradation is small. Lincomycin bioactivity is readily degraded by mixtures of urine, feces and soil. The half-life of degradation was about 20 days.

BIOACCUMULATIVE POTENTIAL: Lincomycin has a low octanol-water partition coefficient at all pHs. The octanol-water partition at pH 7 is 2.550. Calculated flowing and static bioaccumulation factors are 2.21 and 9.96, respectively. Lincomycin will be expected to migrate to the aqueous environment, but it should not bioaccumulate in aquatic organisms.

ABIOTIC POTENTIAL: Lincomycin has a low octanol-water partition coefficient at all pHs. The octanol-water partition at pH 7 is 2.550. Calculated flowing and static bioaccumulation factors are 2.21 and 9.96, respectively. Lincomycin will be expected to migrate to the aqueous environment, but it should not bioaccumulate in aquatic organisms.

ECOTOXICITY: No adverse effect 96-hour rainbow trout 980 mg/L; no adverse effect 96-hour bluegill 980 mg/L; no adverse effect 48-hour daphnia magna >900 mg/L.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with applicable international, national, state, and/or local waste disposal regulations.

14. SHIPPING REGULATIONS

Not regulated for transportation by the United States Department of Transportation (DOT), International Maritime Organization (IMO), or International Air Transport Association (IATA). May be subject to state and/or local transportation requirements.

15. OTHER INFORMATION

PREPARED BY: Health and Safety Regulatory Affairs.

DISCLAIMER: The MSDS information is believed to be correct but should only be used as a guide. Pharmacia & Upjohn disclaims any express or implied warranty as to the accuracy of the MSDS information and shall not be held liable for any direct, incidental or consequential damages resulting from reliance on the information.

16. LABELING

This drug is subject to FDA labeling requirements; therefore, it is exempt from the labeling requirements of the OSHA Hazard Communication Standard.

NDC 0009-0487-05
NDC 0009-0494-17

June 23, 1997