

PENNFIELD

MATERIAL SAFETY DATA SHEET

PENNCHLOR•S™-700

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Item Number:
005591

IN CASE OF EMERGENCY
CONTACT: (800) 832-8303

PRODUCT IDENTIFICATION:

TRADE NAME: Pennchlor•S™
CHEMICAL FAMILY: Tetracyclines, Sulfonamides
MOLECULAR FORMULA: C₂₂H₂₃ClN₂O₈ Chlortetracycline as HCl
C₁₂H₁₄N₄O₂S-Sulfamethazine
PRODUCT: Type A Medicated Article (Premix) – For use in
the manufacture of medicated animal feeds.

Follow label directions. Product is not for human consumption. Avoid unnecessary exposure. This product contains ingredients that may be a potential health hazard or source of personal discomfort. If this product gets into your eyes or is swallowed, follow the emergency and first aid procedures described below and obtain medical attention immediately.

PRODUCT INGREDIENTS:

Active Ingredient: Chlortetracycline (as the calcium complex) equivalent to 35 grams per pound of Chlortetracycline Hydrochloride; 35 grams per pound of sulfamethazine.
Inert Ingredients: Calcium Sulfate, Dried Streptomyces aureofaciens Fermentation Product and Mineral Oil.

<u>Ingredient Name</u>	<u>CAS Number</u>
Chlortetracycline	57-62-5
Sulfamethazine	57-68-1
Calcium Sulfate	7778-18-9
Dried Streptomyces aureofaciens Fermentation Product	None Listed
Mineral Oil	8042-47-5

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical State: Free Flowing Powder
Color: Tan to Brown
Odor: Mild Fermentation Odor

Possible dust explosion hazard based on information on related materials.

POTENTIAL HEALTH EFFECTS

Relevant Routes of

Exposure: Inhalation, Skin Contact, Eye Contact, Ingestion.
Target Organs: Respiratory System, Gastrointestinal Systems, Hematopoietic/Blood System, Renal System, Hepatic System, Immune System, Skeletal System, Cardiovascular System, Central Nervous System.

Acute Effects

General: May cause mucous membrane irritation (inflammation). May cause central nervous system effects such as headache, dizziness, drowsiness, fatigue, and lack of muscular coordination. May cause renal (kidney) system effects such as urine retention, increase of decrease in urine production, painful urination, and presence of blood in urine. May cause hepatic (liver) system effects. Signs and systems may include elevation of liver enzyme levels and jaundice (yellowing of the skin and eyes). May cause gastrointestinal effects such as nausea, vomiting, diarrhea, constipation, cramps, and loss of appetite. May cause cardiovascular effects such as increase or decrease in blood pressure, irregular heartbeat, chest pain, and cardiac arrest. May cause respiratory effects such as difficulty in breathing, coughing, wheezing, irritation (inflammation) and respiratory arrest. May cause musculoskeletal effects such as muscle weakness or pain and skeletal abnormalities. May cause allergic reactions.

Skin: May cause skin irritation.
Eye: May cause eye irritation.

Chronic Effects

General: May cause blood system effects.

Carcinogenicity:

Formulation not listed by NTP, IARC, or OSHA.

Mineral Oil
IARC Gr3 not classifiable

Reproductive
Toxicity:

Chlortetracycline

Since this material may effect the developing fetus, females planning to have a child and pregnant women should exercise caution regarding exposure. It is also advisable for nursing mothers to exercise caution regarding exposure.

Sulfamethazine

Since this material may affect the developing fetus, females planning to have a child and pregnant women should exercise caution regarding exposure. It is also advisable for nursing mothers to exercise caution regarding exposure.

Conditions
Aggravated:

Hypersensitivity to this material. Liver conditions and/or impaired liver function. Kidney conditions and/or impaired renal function. Respiratory system conditions. Blood System Disorders.

Additional Health
Hazard Information:

Since this material has been shown to be excreted in breast milk, nursing mothers should exercise caution regarding exposure.

FIRST AID MEASURES

- Inhalation: Remove to fresh air. If discomfort occurs or persists, get medical attention.
- Skin Contact: Remove contaminated clothing and shoes. Wash skin with soap and plenty of water. If irritation occurs or persists, get medical attention. Wash clothing and shoes before reuse.
- Eye Contact: Immediately flush eyes with plenty of water. If irritation occurs or persists, get medical attention.
- Ingestion: If large quantities of this material are swallowed, get medical attention immediately. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person.

FIRE FIGHTING MEASURES

- Flash Point: Not applicable
- Extinguishing Media: Water, Carbon Dioxide, Dry Chemical Foam.

**Unusual Fire and
Explosion Hazards:**

Possible dust explosion hazard based on information on related materials. Toxic emissions may be given off in a fire. See Decomposition Products in STABILITY AND REACTIVITY Section.

**Fire Fighting
Instructions:**

Wear NIOSH/MSHA approved positive pressure, self-contained breathing apparatus and full protective turn out gear. Use caution in approaching fire. Remove containers of this material if it can be done safely. Use water to keep fire exposed containers cool.

ACCIDENTAL RELEASE MEASURES

**Spill Clean Up
Procedures:**

Review Section HAZARDS IDENTIFICATION, and Section EXPOSURE CONTROLS/PERSONAL PROTECTION before proceeding with the clean up. Shut off the source of the spill or leak if it is safe to do so. Eliminate possible ignition sources. Scoop or shovel spilled material into a suitable labeled open head drum. Secure the drum cover and move the container to a safe holding area. Clean spill area thoroughly.

**Treatment and
Disposal:**

Decontaminate all protective clothing and equipment. Dispose of in accordance with recommendations in Section DISPOSAL CONSIDERATIONS.

**Reporting
Requirements:**

The United States Environmental Protection Agency (USEPA) has not established a Reportable Quantity (RQ) for releases of this material. State and local regulations vary and may impose additional reporting requirements.

HANDLING AND STORAGE

**Handling & Storage
Precautions:**

Do not generate dust or expose to ignition sources. Ground and bond all transfer equipment. Milling/mixing/drying should be performed in devices equipped with explosion relief or suppression systems or under inert conditions.

Use with adequate ventilation.

Avoid contact with eyes, skin and clothing.

Avoid prolonged or repeated contact with skin and clothing.

Avoid breathing dust.

When handling, use proper personal protective equipment specified in Section EXPOSURE CONTROLS/PERSONAL PROTECTION.

Wash thoroughly after handling.

Keep container tightly closed when not in use.

Store out of direct sunlight in a well ventilated area at room temperature.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Ventilation:

General room ventilation is adequate unless the process generates airborne dust or fumes.

Personal Protection

Respirator Type(s):

Half face, Negative Pressure Air Purifying, Toxic Dust/Mist/Fume High Efficiency Filter.

Conditions for Use:

Under normal conditions of use, respiratory protection is not expected to be necessary. Respiratory protection is recommended under excessively dusty conditions. OSHA considers effective engineering controls to be the primary means to control worker exposure. Respiratory protection should not substitute for feasible engineering controls. Whenever respiratory protection is used, a complete respirator program should be developed in accordance with OSHA Subpart I (29CFR1910.134) requirements.

Glove Materials:

Any plastic or rubber glove.

Conditions for Use:

Gloves are required if there is a potential for skin contact.

Skin Protection:

Use protective clothing (lab coats, disposable coveralls, etc.) in both production and laboratory areas. Consult the protective clothing manufacturer, supplier and/or industrial hygienist.

Eye Protection:

Safety Goggles Recommended

Exposure Limits

Mineral Oil

OSHA PEL: 10.0 mg/m³ Short Term Exposure Limit

OSHA PEL: 5.00 mg/m³ 8Hr Time Weighted Average

ACGIH TLV: 10.0 mg/m³ Short Term Exposure Limit

ACGIH TLV: 5.00 mg/m³ 8Hr. Time Weighted Average

Calcium Sulfate

OSHA PEL: 15.00 mg/m³ 8 Hr. Time Weighted Average, Respirable

Fraction

OSHA PEL: 15.0 mg/m³ 8 Hr. Time Weighted Average, Total Dust

ACGIH TLV: 10.0 mg/m³ 8 Hr. Time Weighted Average, Total Dust

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Free Flowing Powder
Color: Tan to Brown
Odor: Mild Fermentation Odor
Pure/Mixture: Mixture

STABILITY AND REACTIVITY

Stability: Normally stable even under fire exposure conditions and not water reactive.
Conditions to Avoid: Dust Accumulation
Airborne Dust
Sources of Ignition
Incompatibility
Materials to Avoid: Unknown
Decomposition
Products: Carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen chloride and sulfur oxides.
Polymerization: No
Conditions of
Polymerization: Will not occur.

TOXICOLOGICAL INFORMATION

Chlortetracycline

Acute oral, Single Dose, Rat: > 3000 mg/kg

Summary: Acute Oral LS50 (rat) is greater than 3000 mg/kg body weight in both rats and mice.

Irritation Eye, Rabbit

Summary: This material is mildly irritating to the rabbit eyes.

Irritation Skin, Rabbit

Summary: This material is mildly irritating to the rabbit skin.

Sulfamethazine

Acute Oral, Single Dose, Mouse: 50,000 mg/kg

Summary: Acute Oral LD50 (mouse) is 50 mg/kg body weight which classifies this material as non-toxic orally, under the study conditions utilized.

Teratogenicity Oral, Rat

Summary: In rats, administration of sulfamethazine at does levels of 685 and 865 mg/kg/day on days 6 to 15 of gestation, increased incidence of malformed litters including particularly cleft palate and dilatation of the urinary tract. Maternal toxicity was evident at the high dose in one study. Another rat study, showed no adverse fetal effects of up to 1200 ppm in the feed.

Teratogenicity Oral, Rabbit

Summary: No teratologic effects were seen in rabbits when sulfamethazine was administered by gavage at doses up to 1800 mg/kg/day to the doe.

ECOLOGICAL INFORMATION

No ecological data available on this material.

DISPOSAL CONSIDERATIONS

Disposal

Recommendations: This material is suitable for incineration. These recommendations are based on the product as shipped. Use, processing, alteration or contamination may affect these disposal recommendations. State, local or site restrictions affecting the available proper disposal options may vary.

RCRA Waste #: Not regulated under RCRA

Empty Containers: Empty containers must be triple rinses prior to disposal, recycling, or reuse.

TRANSPORTATION INFORMATION

Enforcement Agency: US Dept. of Transportation

Country/Community: USA

Proper Ship. Name: Non-regulated

REGULATORY INFORMATION

Law/Regulation: Hazardous Chemical Reporting: Community Right-To-Know
40CFR370

Common Name: SARA Title III Section 312 - Hazardous Chemical Inventory

Enforcement Agency: Environmental Protection Agency (EPA)

Governing Authority: USA

Criteria Met: Acute, Fire.

Law/Regulation: Safe Drinking Water and Toxic Enforcement Act of 1985
Proposition 65

Common Name: Prop 65

Enforcement Agency: California Environmental Protection Agency
Governing Authority: California, USA
Criteria Met: Formulation contains a member of the Tetracycline which are known to the state to cause reproductive toxicity.

OTHER INFORMATION

Additional Information: NFPA RATING: These ratings are based on NFPA Code 704 and are intended for use by emergency personnel to determine the immediate hazards of a material.

. Health	1
. Fire	1
. Reactivity	0

The information and statements herein are believed to be reliable, but are not to be construed as a warranty or representation for which the manufacturer assumes legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. **NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.**