



Material Safety Data Sheet

Date Prepared: 10/13/03
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Ethambutol Hydrochloride

IDENTIFICATION

Common Name: Ethambutol Hydrochloride **Chemical Name:** Ethambutol Hydrochloride

Synonym: 1-Butanol, 2,2'-(1,2-ethanediyl-diimino)bis-, dihydrochloride, [S-(R*,R*)]-

CAS Number: 1070-11-7

Formula: C₁₀H₂₄N₂O₂ • 2HCl

Chemical Family: An Ethylenediamine

RTECS Number: EL3854000

Therapeutic Category: Antibacterial (tuberculostatic)

INGREDIENT INFORMATION

Principle Components

Ethambutol Hydrochloride

Percent

Pure Material

Exposure Limits

n/f

HEALTH HAZARD INFORMATION

Usual Adult Dose: The usual oral adult dose of ethambutol hydrochloride (in combination therapy) is 15 to 25 mg per kg of body weight once a day, not to exceed 2.5 grams daily.

Adverse Effects: Adverse effects may include chills; painful or swollen joints, especially big toe, ankle, or knee, with tense, hot skin over affected joints; confusion; disorientation; headache; abdominal pain; nausea; vomiting; and loss of appetite. Blurred vision, eye pain, red-green color blindness, or any loss of vision may indicate serious ocular damage. Possible allergic reaction to material if inhaled, ingested or in contact with skin.

Overdose Effects: n/f

Acute: Possible eye, skin, gastrointestinal and/or respiratory tract irritation.

Chronic: Possible hyper sensitization.

Inhalation: May cause irritation. Remove to fresh air. Material may be absorbed from the lungs.

Eye: May cause irritation. Flush with copious quantities of water.

Skin: May cause irritation. Flush with copious quantities of water.

n/f = not found

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HEALTH HAZARD INFORMATION CONTINUED

Ingestion: May cause irritation. Flush out mouth with water. This material is rapidly absorbed from the gastrointestinal tract.

Medical Conditions Aggravated by Exposure: Hypersensitivity to material, optic neuritis, and impaired kidney function.

Cross Sensitivity: n/f

Pregnancy Comments: Ethambutol hydrochloride has been used in humans throughout pregnancy and no adverse fetal effects have been reported. However, studies in animals given high doses have shown that ethambutol can cause a low incidence of minor developmental abnormalities.

Pregnancy Category: n/f

FIRST AID MEASURES

General: Remove from exposure. Remove contaminated clothing. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention. If person is not breathing give artificial respiration. If breathing is difficult give oxygen. Obtain medical attention.

Overdose Treatment: Treatment should be symptomatic and supportive. Ethambutol hydrochloride is removed by hemodialysis and peritoneal dialysis.

TOXICOLOGICAL INFORMATION

Oral Rat: LD50: 6800 mg/kg

Oral Mouse: LD50: 8900 mg/kg

Irritancy Data: n/f

Target Organ(s): n/f

Listed as a Carcinogen? NTP: No IARC: No OSHA: No Other: No

FIREFIGHTING MEASURES

Flash Point: n/f

Upper Flammable Limit: n/f

Auto-Ignition Temperature: n/f

Lower Flammable Limit: n/f

Extinguisher Media: Water spray, dry chemical, carbon dioxide or foam as appropriate for surrounding fire and materials.

Fire and Explosion Hazards: This material is assumed to be combustible. As with all dry powders it is advisable to ground mechanical equipment in contact with dry material to dissipate the potential buildup of static electricity.

Firefighting Procedures: As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

n/f = not found

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PHYSICAL HAZARDS

Conditions to Avoid: Avoid exposure to moisture.

Incompatibilities: n/f

Decomposition Products: When heated to decomposition material emits toxic fumes of NO_x and HCl. Emits toxic fumes under fire conditions.

Stable? Yes

Hazardous Polymerization? No

HANDLING / SPILL / DISPOSAL MEASURES

Handling: As a general rule, when handling ethambutol hydrochloride, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Wash thoroughly after handling.

Storage: Store in tight, light-resistant container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

Spill Response: Wear approved respiratory protection, chemically compatible gloves and protective clothing. Wipe up spillage or collect spillage using a high efficiency vacuum cleaner. Avoid breathing dust. Place spillage in appropriately labeled container for disposal. Wash spill site.

Disposal: Dispose of waste in accordance with all applicable Federal, State and local laws.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: When working with small quantities in a well-ventilated area, respiratory protection may not be required. The use of an approved dust mask is recommended.

Ventilation: No special ventilation requirements. **Protective Clothing:** Protect exposed skin.

Gloves: Rubber

Eye Protection: Safety Glasses

PHYSICAL AND CHEMICAL PROPERTIES

NOTE: The data reported below is general information, and is not specific to the Lot provided!

Appearance and Odor: White crystalline powder; odorless.

Melting Point: 198 - 202° C

Solubility in Water: Freely soluble

Evaporation Rate: n/f

Evaporation Rate: n/f

Reactivity in Water: n/f

% Volatile by Volume: n/f

Vapor Density: n/f

Boiling Point: n/f

Specific Gravity: n/f

Vapor Pressure: n/f

n/f = not found

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