



Material Safety Data Sheet

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Responsible Party: Reference Standards Technical Services

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ACETAZOLAMIDE

Catalog Number: 1005004

Package Size: 2 g

Revision Date:

June 1, 2004

SECTION 1 - IDENTIFICATION

Common Name: Acetazolamide

Formula: C₄H₆N₄O₃S₂

Synonym: n/f

Chemical Name: Acetamide, N-[5-(aminosulfonyl)-1,3,4-thiadiazol-2-yl]-

CAS Number: 59-66-5

RTECS Number: AC8225000

Chemical Family: 1,3,4-Thiadiazole derivative (sulfonamide)

Therapeutic Category: Carbonic anhydrase inhibitor

SECTION 2 - INGREDIENT INFORMATION

<u>Principle Components</u>	<u>Percent</u>	<u>Exposure Limits</u>
Acetazolamide	Pure Material	n/f

SECTION 3 - HEALTH HAZARD INFORMATION

Usual Adult Dose: The usual oral adult dose of acetazolamide is 250 mg one to four times a day.

Adverse Effects: Adverse effects may include unusual tiredness or weakness; diarrhea; increased frequency or amount of urination; loss of appetite; metallic taste; nausea or vomiting; numbness, tingling or burning in mouth, anus, or extremities; weight loss; blood in urine; difficult urination; pain in lower back; pain or burning while urinating; sudden decrease in amount of urine; mental depression; dizziness; and drowsiness. 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 hypersensitization.

Inhalation: May cause irritation. Remove to fresh air.

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

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

Ingestion: May cause irritation. Flush out mouth with water. This material is well absorbed from the gastrointestinal tract. Onset of action is 60 to 90 minutes; duration of action is 8 to 12 hours.

**Medical Conditions
Aggravated by Exposure:**

Hypersensitivity to material, adrenal gland failure, adrenocortical insufficiency, hyperchloremic acidosis, electrolyte imbalance, kidney stones, and liver or kidney disease or function impairment.

Cross Sensitivity: Persons sensitive to antibacterial sulfonamides, thiazide diuretics, other sulfonamide-derivative diuretics, or other carbonic anhydrase inhibitors may be sensitive to this material also.

Pregnancy Comments: Adequate and well-controlled pregnancy studies in humans have not been done. However, acetazolamide has been shown to cause limb defects in animals.

Pregnancy Category: C

SECTION 4 - 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 of acetazolamide overdose should be symptomatic and supportive and may include the following:

1. Do NOT induce vomiting, which may exacerbate fluid/electrolyte imbalances.
2. Administer activated charcoal as a slurry. Cathartics may potentiate fluid and electrolyte imbalance and should be avoided.
3. Monitor fluid and electrolyte balance carefully and obtain arterial blood gases in symptomatic patients in case of metabolic acidosis.
4. Treat severe acidosis with IV sodium bicarbonate. [Meditext 2004]

SECTION 5 - TOXICOLOGICAL INFORMATION

Oral Rat: LD50: n/f

Oral Mouse: LD50: 4300 mg/kg

Irritancy Data: n/f

Target Organ(s): Kidneys

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

Other: No

SECTION 6 - 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.

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SECTION 7 - PHYSICAL HAZARDS

Conditions to Avoid: n/f

Incompatibilities: n/f

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

Stable? Yes **Hazardous Polymerization?** No

SECTION 8 - HANDLING / SPILL / DISPOSAL MEASURES

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

Storage: Store in tight 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 labelled container for disposal. Wash spill site.

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

SECTION 9 - 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.

Gloves: Rubber

Eye Protection: Safety Glasses

Protective Clothing: Protect exposed skin.

SECTION 10 - PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance and Odor: White to yellowish-white crystalline powder; odorless.

Melting Point: 258 - 259° C

Solubility in Water: Very slightly soluble

Vapor Density: n/f

Boiling Point: n/f

Evaporation Rate: n/f

Specific Gravity: n/f

Reactivity in Water: n/f

Vapor Pressure: n/f

% Volatile by Volume: n/f