



# Material Safety Data Sheet

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Responsible Party: Reference Standards Technical Services

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## BUTABARBITAL

Catalog Number: 1079000

Package Size: 200 mg

Revision Date:

May 26, 2004

EMERGENCY OVERVIEW - Toxic, Reproductive Hazard.

### SECTION 1 - IDENTIFICATION

**Common Name:** Butabarbital

**Formula:** C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub>

**Synonym:** Secbutobarbitone

**Chemical Name:** 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-(1-methylpropyl)-

**CAS Number:** 125-40-6

**RTECS Number:** CQ1750000

**Chemical Family:** 5,5-Disubstituted pyrimidinetrione

**Therapeutic Category:** Sedative-hypnotic (barbiturate)

### SECTION 2 - INGREDIENT INFORMATION

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

### SECTION 3 - HEALTH HAZARD INFORMATION

**Usual Adult Dose:** The usual oral adult dose of butabarbital (as the sodium salt) is 50 to 100 mg at bedtime or 15 to 30 mg three or four times a day.

**Adverse Effects:** Adverse effects of barbiturates may include confusion, mental depression, unusual excitement, clumsiness or unsteadiness, dizziness or lightheadedness, drowsiness, "hangover" effects, anxiety or nervousness, constipation, feeling faint, headache, irritability, nausea or vomiting, and nightmares or trouble sleeping. Possible allergic reaction to material if inhaled, ingested or in contact with skin.

**Overdose Effects:** In acute barbiturate overdose, overdose effects may not occur until several hours after a toxic ingestion and

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may include severe confusion, decrease in loss of reflexes, severe drowsiness, change in body temperature, slow or troubled breathing, slow heartbeat, slurred speech, staggering, unusual movements of the eyes, and severe weakness. Central nervous system and respiratory depression may progress to absence of reflexes, slight constriction of the pupils (in severe toxicity, pupils may be dilated), decreased urination, rapid heart beat, lowered body temperature, and coma. Typical shock syndrome, lack of breathing, circulatory collapse, and death may occur.

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

**Chronic:** Possible hypersensitization, liver damage (yellow eyes or skin), osteopenia or rickets (bone pain, tenderness, or aching; loss of appetite; muscle weakness; unusual weight loss), tolerance, and dependence.

**Inhalation:** May cause irritation. Remove to fresh air.

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

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

**Ingestion:** May cause irritation, bitter taste, and toxicity. Avoid ingestion. Flush out mouth with water. This material is absorbed from the gastrointestinal tract and has a 45 to 60 minute onset of action. Its duration of action is 6 to 8 hours.

## Medical Conditions Aggravated by Exposure:

Hypersensitivity to material, alcohol or drug use or dependence, porphyria, respiratory disease, liver function impairment, and acute or chronic pain.

**Cross Sensitivity:** Persons sensitive to one barbiturate may be sensitive to this material also.

**Pregnancy Comments:** Barbiturates have been shown to cause an increased incidence of fetal abnormalities, and use during the last trimester of pregnancy may cause physical dependence and withdrawal in the newborn.

**Pregnancy Category:** D

## 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 barbiturate overdose should be symptomatic and supportive and may include the following:

1. Administer activated charcoal as a slurry. This is most effective when administered within one hour of ingestion.
2. Consider gastric lavage if it can be performed soon after ingestion, unless contraindicated. Control seizures prior to initiation and protect airway.
3. For hypotension: Infuse 10 to 20 mL/kg isotonic fluid. If hypotension persists, administer dopamine or norepinephrine.
4. Hemodialysis has been used successfully in short acting barbiturate intoxication. Charcoal or resin hemoperfusion is more effective and should be considered in patients with hypotension not responsive to supportive care. [Meditext 2004]

## SECTION 5 - TOXICOLOGICAL INFORMATION

**Oral Rat:** LD50: n/f

**Oral Mouse:** LD50: n/f

**Irritancy Data:** n/f

**Target Organ(s):** Central nervous system

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

**Other:** No

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## 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.

## SECTION 7 - PHYSICAL HAZARDS

**Conditions to Avoid:** n/f  
**Incompatibilities:** n/f  
**Decomposition Products:** When heated to decomposition material emits toxic fumes of NOx. 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. Additionally, because this is a controlled substance, notify local DEA office for appropriate disposal procedures.

## SECTION 9 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Respiratory Protection:** Use a NIOSH approved respirator, if it is determined to be necessary by an industrial hygiene survey involving air monitoring. In the event that a respirator is not required, an approved dust mask should be used.  
**Ventilation:** Recommended.  
**Gloves:** Rubber  
**Eye Protection:** Safety Goggles  
**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:** Fine, white crystalline powder; odorless.  
**Melting Point:** 164 - 168° C  
**Solubility in Water:** Very slightly soluble **Vapor Density:** n/f

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**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