Material Safety Data Sheet

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Responsible Party: Reference Standards Technical Services

METHARBITAL

Catalog Number: 1405002 **Package Size:** 200 mg **Revision Date:** August 20, 2003

EMERGENCY OVERVIEW - Reproductive Hazard.

SECTION 1 - IDENTIFICATION

Common Name: Metharbital **Formula:** C9H14N2O3

Synonym: Metharbitone; Methylbarbital

Chemical Name: 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5,5-diethyl-1-methyl-

CAS Number: 50-11-3 **RTECS Number:** CQ3675000

Chemical Family: A 5,5-Disubstituted pyrimidinetrione

Therapeutic Category: Anticonvulsant (barbiturate)

SECTION 2 - INGREDIENT INFORMATION

Principle Components	Percent	Exposure Limits
Metharbital	Pure Material	n/f

SECTION 3 - HEALTH HAZARD INFORMATION

Usual Adult Dose: The usual oral adult dose of metharbital is 100 mg once or more per day, not to exceed a maximum of 800 mg per day, in divided doses.

Adverse Effects: Adverse effects may include clumsiness, dizziness, drowsiness or a "hangover" effect, anxiety or nervousness, constipation, feeling faint, headache, irritability, nausea or vomiting, nightmares or trouble sleeping, confusion, mental depression, and unusual excitement. 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

n/f = not found

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 and/or respiratory tract irritation

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

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. Flush out mouth with water. This material is absorbed from the gastrointestinal tract. Its onset of action is within 60 minutes, and its duration of action is up to 12 hours.

Medical Conditions Aggravated by Exposure: Hypersensitivity to material, drug or alcohol dependence, porphyria, respiratory disease, impaired liver function, and acute or chronic pain.

Cross Sensitivity: Persons sensitive to one of the barbiturates may be sensitive to this material also.

Pregnancy Comments: Barbiturates have been shown to cause an increased incidence of fetal abnormalities. Use of barbiturates throughout the last trimester of pregnancy may cause physical dependence with resulting withdrawal symptons 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. To decrease absorption, if the patient is conscious and has not lost the gag reflex, vomiting may be induced with ipecac syrup. Aspiration of vomitus must be prevented. After vomiting is completed, administer 30 to 60 grams of activated charcoal in a glass of water or sorbitol to increase excretion of the barbiturate.
2. If vomiting is contraindicated, gastric lavage may be performed with a cuffed endotracheal tube in place and the patient face down. Activated charcoal should be left in the stomach and a saline cathartic may be administered.
3. To enhance elimination and if renal function is normal, forced diuresis may help to eliminate the barbiturate. Alkalinization of the urine increases renal excretion. Hemodialysis or hemoperfusion may be used in severe barbiturate poisoning or if the patient is anuric or in shock.
4. Monitor vital signs and fluid balance. Avoid sodium or fluid overload.
5. Maintain an adequate airway with assisted respiration and administration of oxygen as needed.
6. Maintain blood pressure and body temperature.
7. For shock, administer fluid therapy and other standard treatment.
8. For hypotension, a vasopressor may be required.
9. Chest physiotherapy should be administered.
10. Appropriate care should be taken to prevent hypostatic pneumonia, decubiti, aspiration, and other complications that may occur.
11. If pneumonia is suspected, appropriate cultures should be taken and antibiotics should be administered. [USP DI 2003]

SECTION 5 - TOXICOLOGICAL INFORMATION

n/f = not found

Oral Rat: LD50: n/f

Oral Mouse: LD50: 500 mg/kg

Irritancy Data: n/f

Target Organ(s): Central nervous system.

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.

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

n/f = not found

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 nearly white crystalline powder; faint odor.

Melting Point: 155° C

Solubility in Water: Slightly soluble

Boiling Point: n/f

Specific Gravity: n/f

Vapor Pressure: n/f

Vapor Density: n/f

Evaporation Rate: n/f

Reactivity in Water: n/f

% Volatile by Volume: n/f

n/f = not found