

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Name: NEMBUTAL (R) Sodium Solution  
NEMBUTAL (R) Sodium Solution 2 ml Vial  
NEMBUTAL (R) Sodium Solution 2 ml Ampule  
List Number: 6899 \* 3778 \*  
National Drug Code: 0074-6899-04 \* 0074-3778-04 \*  
0074-3778-05

MANUFACTURER: Abbott Laboratories  
Pharmaceutical Products Division  
200 Abbott Park Road  
Abbott Park, Illinois 60064-3537

EMERGENCY TELEPHONE NUMBER: 1-800-441-4987  
CHEMTREC TELEPHONE NUMBER: 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME: Pentobarbital Sodium \*  
CAS/RTECS NUMBERS: 57-33-0 / CQ6125000  
OSHA-PEL 8HR TWA: N/L  
STEL: N/L  
CEILING: N/L  
ACGIH-TLV 8HR TWA: N/L  
STEL: N/L  
CEILING: N/L  
OTHER 8HR TWA: 40 mcg/m3 (Abbott Laboratories)  
LIMITS STEL: N/A  
CEILING: N/A

\* Hazardous per OSHA criteria

INGREDIENT NAME: Ethyl Alcohol \*  
CAS/RTECS NUMBERS: 64-17-5 / KQ6300000  
OSHA-PEL 8HR TWA: 1000 ppm  
STEL: N/L  
CEILING: N/L  
ACGIH-TLV 8HR TWA: 1000 ppm  
STEL: N/L  
CEILING: N/L  
OTHER 8HR TWA: N/A  
LIMITS STEL: N/A  
CEILING: N/A

\* Hazardous per OSHA criteria

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UNIV OF WIS-DEPT PSYC  
800 W MAIN/ROOM 4014  
WHITEWATER, WI 53190

=== MSDS TRACKING INFORMATION ===  
MID: 1058570 NEMBUTAL SOD INJ 50MG/M  
PID: 2585710 CUST: 0172674-009  
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2. COMPOSITION/INFORMATION ON INGREDIENTS, continued

INGREDIENT NAME: Propylene Glycol \*  
CAS/RTECS NUMBERS: 57-55-6 / TY2000000  
OSHA-PEL 8HR TWA: N/L  
                  STEL: N/L  
                  CEILING: N/L  
ACGIH-TLV 8HR TWA: N/L  
                  STEL: N/L  
                  CEILING: N/L  
OTHER 8HR TWA: 50 ppm total vapor and aerosol, 10 mg/m3 aerosol  
                  alone (AIHA WEEL)  
LIMITS           STEL: N/A  
                  CEILING: N/A  
\* Hazardous per OSHA criteria

3. HAZARDS INFORMATION

EMERGENCY OVERVIEW: In clinical use this material is used to produce sedation and sleep. The active material is toxic by ingestion, is a reproductive hazard and can cause dependence. Target organs include the central nervous system, cardiovascular system, liver and fetus.

ROUTE(S) OF ENTRY:           Skin: Unlikely  
                                  Inhalation: Unlikely  
                                  Ingestion: Unlikely

INGESTION RATING: N/D.

SKIN ABSORPTION RATING: N/D.

INHALATION RATING: N/D.

CORROSIVENESS RATING: No.

SKIN CONTACT RATING: N/D.

SKIN SENSITIZATION RATING: N/D.

EYE CONTACT RATING: N/D.

TARGET ORGANS: Central nervous system, fetus, liver, cardiovascular system

CARCINOGENICITY RATING: NTP: N/L IARC: N/L OSHA: N/L  
ACGIH: N/L

Phenobarbital, a related material, has been classified by IARC as  
possibly carcinogenic to humans. MSDS TRACKING INFORMATION ===  
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3. HAZARDS INFORMATION, continued

SIGNS AND SYMPTOMS: N/D. In clinical use, pentobarbital sodium depresses the central nervous system producing drowsiness, sedation and hypnosis. Adverse reactions include somnolence and other central nervous system effects, slow breathing, reduced heart rate and blood pressure, nausea and headache. Overdose can cause slurred speech, staggering, respiratory depression, lowered body temperature and coma.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Hypersensitivity to barbiturates, chronic pain, central nervous system depressant use or therapy, liver injury, cardiovascular disease and porphyria, and respiratory disease. May interfere with estrogenic and progestational contraceptives.

4. FIRST AID MEASURES

EYES: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. No known antidote. Provide symptomatic/supportive care as necessary.

SKIN: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. No known antidote. Provide symptomatic/supportive care as necessary.

INGESTION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. If exposure was by ingestion and patient is conscious with gag reflex, induce emesis followed by administration of activated charcoal to reduce absorption. No known antidote. Provide symptomatic/supportive care, maintaining ventilation, monitoring vital signs and fluid balance as required.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. No known antidote. Provide symptomatic/supportive care, maintaining ventilation, monitoring vital signs and fluid balance as required.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: N/D  
FLASH POINT METHOD: N/A  
LOWER EXPLOSIVE LIMIT(%): N/D  
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5. FIRE FIGHTING PROCEDURES, continued

UPPER EXPLOSIVE LIMIT(%): N/D  
AUTOIGNITION TEMPERATURE: N/D

FIRE & EXPLOSION HAZARDS: N/D

EXTINGUISHING MEDIA: Use media appropriate for primary cause of fire.

FIRE FIGHTING INSTRUCTIONS: None known.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE PROCEDURES: Small Spills: Flush with large quantities of water and discharge into an approved sewer. Large Spills: Contain and collect spill. Dispose as directed in Section 13. Wash surface containing residue with large quantities of water.

7. HANDLING AND STORAGE

HANDLING: N/A

STORAGE: N/A

SPECIAL PRECAUTIONS: N/A

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: N/A

RESPIRATORY PROTECTION: N/A

SKIN PROTECTION: N/A

EYE PROTECTION: N/A

OTHER PROTECTION: N/A. Use good clinical and hygienic practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Clear, colorless solution.

ODOR: N/A

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9. PHYSICAL AND CHEMICAL PROPERTIES, continued

BOILING POINT: N/D  
MELTING/FREEZING POINT: N/A  
VAPOR PRESSURE (mm Hg): N/D  
VAPOR DENSITY (Air=1): N/D  
EVAPORATION RATE: N/D  
BULK DENSITY: N/D  
SPECIFIC GRAVITY: N/D  
SOLUBILITY: N/D  
pH: N/D  
VISCOSITY: N/D

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: N/D  
INCOMPATIBILITIES: N/D  
HAZARDOUS DECOMPOSITION PRODUCTS: N/D  
HAZARDOUS POLYMERIZATION: N/D

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY: N/D. LD50 = 60-239 mg/kg in rats, guinea pigs, mice, dogs and rabbits for pentobarbital sodium (Toxic). TDLo = 6.4-60 mg/kg in men and women for pentobarbital. An oral dose of about 2-10 g of barbiturates is lethal in humans. LD50 = 5560-7060 mg/kg in rats, mice, rabbits and guinea pigs for ethyl alcohol. LD50 = 19,000 - 24,000 mg/kg in mice, rats, guinea pigs and dogs for propylene glycol.

DERMAL TOXICITY: N/D. None expected from normal clinical use of this product. LDLo = 20,000 mg/kg in rabbits with ethyl alcohol. LD50 = 20,800 mg/kg in rabbits for propylene glycol.

INHALATION TOXICITY: N/D. None expected from normal clinical use of this product. LC50 = 20,000 ppm/10 hr in rats and 39,000 mg/m<sup>3</sup>/4hr in mice for ethyl alcohol.

CORROSIVENESS: N/D.

DERMAL IRRITATION: N/D. None expected from normal clinical use of this product. Ethyl alcohol is a mild-severe skin irritant in rabbits. Propylene glycol is a mild skin irritant in rabbits and a

WARNING: This is a skin irritant in man.  
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## 11. TOXICOLOGICAL INFORMATION, continued

OCULAR IRRITATION: N/D. None expected from normal clinical use of this product. Ethyl alcohol is a moderate-severe eye irritant in rabbits. Propylene glycol is a mild eye irritant in rabbits.

DERMAL SENSITIZATION: N/D. None expected from normal clinical use of this fproduct. Propylene glycol exhibited some potential to produce skin sensitization in studies in humans.

SPECIAL TARGET ORGAN EFFECTS: N/D. In clinical use, pentobarbital sodium produces sedation and sleep. Physical and psychological dependence can result from continued use of barbiturates. Barbiturate therapy has been associated with an increased incidence of fetal abnormalities and fetal withdrawal at birth. Pentobarbital sodium was also reported to produce adverse effects on reproduction in animals. Pentobarbital sodium may accumulate with repeated exposure because it is slowly eliminated from the body. Ethyl alcohol is known to produce liver injury, is reported to be a mutagen, and is a teratogen in humans. Heinz body formation or erythrocytes destruction found in animals at repeated dosages of 500 mg/kg or more.

CARCINOGENICITY INFORMATION: N/D. In animal studies, lifetime administration of phenobarbital sodium produced benign and malignant liver tumors in mice and benign liver tumors in rats.

## 12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/D

## 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: All waste must be packaged, labeled, transported and disposed of in conformance with applicable local, state and federal laws and regulations and in accordance with good engineering practices. This material is not a RCRA hazardous waste.

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14. TRANSPORTATION INFORMATION

DOT STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A

IATA/ICAO STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A

IMO STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A  
FLASH POINT: N/D

15. REGULATORY INFORMATION

TSCA STATUS: FDA regulated materials are exempt from TSCA.

CERCLA STATUS: N/L

SARA STATUS: N/A

RCRA STATUS: This material is not a RCRA hazardous waste.

PROP 65 (CA): N/D

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16. OTHER INFORMATION  
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LEGEND: N/A = Not Applicable  
N/D = Not Determined  
N/L = Not Listed  
L = Listed  
C = Ceiling  
S = Short-term  
(R) = Registered Trademark of Abbott Laboratories  
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