

Signs & Symptoms of Exposure: May cause tiredness, dizziness, unconsciousness, nausea, vomiting, constipation, abdominal pain, heart palpitations, sweating/clammy skin, skin rashes, hallucinations, euphoria, visual disturbances, headache, pinpoint pupils. May cause irritation.

Medical Conditions Generally Aggravated by Exposure: Persons with respiratory and circulatory problems, liver or kidney disease physical dependence on narcotics and hypersensitivity to Butorphanol may have more severe effects from exposure.

BVL Hazard Category: 3

Section IV - FIRST AID MEASURES

Eye Exposure: Flush eyes with large volumes of water for 15 or more minutes.

Skin Exposure: Wash skin with cool, soapy water for 15 minutes.

Ingestion: Seek medical attention from a physician immediately. Induce vomiting if person is conscious. Never induce vomiting on an unconscious person.

Inhalation: If difficulty breathing, administer oxygen. Seek attention of a physician immediately. If necessary, provide artificial respiration.

Overdose should be treated symptomatically to maintain airway.

Section V - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Not Applicable **LEL:** Not Applicable **UEL:** Not Applicable

Extinguishing Media: Use water or a type ABC multi-purpose extinguisher.

Special Fire Fighting Procedures: As with all fires, evacuate personnel to a safe area. Firefighters should wear self-contained breathing apparatus to avoid smoke inhalation. Product is aqueous-based and is not expected to present a fire hazard concern.

Unusual Fire/Explosion Hazards: NONE

Section VI - ACCIDENTAL RELEASE INFORMATION

Release to Land: Absorb Butorphanol with sorbent materials and dispose of according to local, state, and federal guidelines.

Release to Air: If aerosolized, reduce exposures by ventilating area; clean up spill immediately to prevent evaporation.

Release to Water: Refer to local water authority. Drain disposal is not recommended; however, refer to local, state, and federal disposal guidelines.

Section VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled: See Section VI above. Wear latex or nitrile gloves and safety glasses when cleaning spills. A dust/mist respirator (N95) may be necessary if excessive aerosols are generated.

Waste Disposal Method: Incineration in an approved/permitted incinerator is recommended. Refer to local, state, and federal rules.

Precautions to be taken in handling and storing: Store at room temperature (<86°F).

Other Precautions: Take care to prevent aerosolization of product.

Section VIII - CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Under normal use, respirators are not required. If aerosols are generated, a disposable dust/mist respirator (N95) may be used. Personnel wearing respirators should be fit tested and approved for respirator use under the OSHA Respiratory Protection Standard 29 CFR 1910.134.

Ventilation: Handle product in a well-ventilated area.

Protective Gloves: Nitrile or latex

Eye Protection: Safety glasses

Other Protective Clothing or Equipment: Lab coat

Work/Hygienic Practices: Wash hands following use. No eating, drinking, or smoking when handling this product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical State: Liquid

Appearance and Odor: Clear, colorless, odorless

Boiling Point: Approximate to water

Vapor Pressure: Approximate to water

Vapor Density: Approximate to water

pH: 7.5

Specific Gravity: Unknown

Melting Point: Not applicable

Evaporation Rate: Unknown

Solubility in Water: Solution will mix well with water

Section X - STABILITY AND REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): Strong oxidizers and water reactive materials

Hazardous Decomposition or Byproducts: As with any burning material, carbon monoxide, carbon dioxide, nitrogen oxides, and sulfur oxides may be produced.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Storage with oxidizers and water reactive materials

Section XI - TOXICOLOGICAL INFORMATION

For Butorphanol Tartrate (active ingredient):

LD₅₀ rat, oral = 315 mg/kg

LD₅₀ rat, intraperitoneal = 127 mg/kg

LD₅₀ rat, subcutaneous = 425 mg/kg

LD₅₀ rat, intravenous = 17 mg/kg

LD₅₀ rat, intramuscular = 255 mg/kg

LD₅₀ mouse, oral = 395 mg/kg

LD₅₀ mouse, intraperitoneal = 192 mg/kg

LD₅₀ mouse, subcutaneous = 299 mg/kg

LD₅₀ mouse, intramuscular = 208 mg/kg

LD₅₀ dog, intravenous = 10 mg/kg

LD₅₀ dog, intramuscular = 17 mg/kg

LD₅₀ mouse, intravenous = 36 mg/kg

Additional reproductive health and toxicity data is available from the National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemical Substances (RTECS).

Section XII - ENVIRONMENTAL IMPACT INFORMATION

Information is currently not available on the environmental impact of Butorphanol Tartrate. Handle in a manner to prevent spills or releases to the environment.

Section XIII - DISPOSAL INFORMATION

Dispose of as a Schedule IV Controlled Substance according to DEA Guidelines.

Dispose of by incineration at an approved/permitted incinerator.

Review local, state, and federal regulations for your regulatory area.

Section XIV - TRANSPORTATION INFORMATION

Butorphanol Tartrate Injection, USP is not a DOT hazardous material.

Butorphanol is not a Marine Pollutant.

Section XV - REGULATORY INFORMATION

SARA 313 listed?: NO

CERCLA listed?: NO

RCRA listed?: NO

Section XVI - OTHER DATA

1. Use of this product should be through or under the direction of a physician. This MSDS does not address the therapeutic use of this material.
2. Persons administering this drug to patients must be careful to avoid needle sticks to syringes and other sharps used in the administration. All needle sticks must be reported to your company management.

The information provided is believed to be complete and accurate. It is the user's responsibility to use the information according to their application. Bedford Laboratories and Ben Venue Labs, Inc. assumes no additional liability or responsibility resulting from the use of or reliance on this information.