



300 Northfield Road
 Bedford, OH 44146
 Telephone: (440) 232-3320
 -or- (800) 562-4797

MATERIAL SAFETY DATA SHEET

Section I - IDENTITY

Common/Trade Name: Propranolol Injection (1 mg/mL)
Chemical Names: 2-Propanol,1-[(isopropylamino)-3-(1-naphthyloxy)-hydrochloride
Synonyms: Inderal Injection, WAL 76539, Analprilin, AY64043, Berkolol, Caridol Propranolol Hydrochloride, Deralin, Dociton, Frekven, ICI 45520, NSC-91523, Oposim, Pylapron, Rapynogen, Tesnol
Manufacturer's Name: BEN VENUE LABORATORIES, INC.
Address: 300 NORTHFIELD ROAD
 BEDFORD, OH 44146
Emergency Telephone Number: Chemtrec: 1(800) 424-9300
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Medical Emergency: Professional Services 1(800) 521-5169
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Section II - HAZARDOUS INGREDIENTS/COMPOSITION INFORMATION

<u>Component</u>	<u>%</u>	<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other Limits Recommended</u>
Propranolol Hydrochloride	1.0	318-98-9	NONE	NONE	50 mcg/m ³
Citric Acid Anhydrous	0.01	77-92-9	NONE	NONE	NONE
Water for Injection	98.09	7732-18-5	NONE	NONE	NONE

Propranolol is a sterile injectable liquid drug provided in a vial.

Section III - HEALTH HAZARD DATA

Routes of Entry: Product may be absorbed via inhalation, ingestion or injection.
Health Hazard (Acute & Chronic): Propranolol is an antihypertensive and is used to reduce cardiovascular mortality in patients who have survived heart attacks. It is also for treating migraines. Product affects the circulatory, respiratory and central nervous systems.
Carcinogenicity: NTP? NO IARC Monographs? NONE
 OSHA Regulated? NO

Signs & Symptoms of Exposure: A wide variety of effects may occur upon acute exposure. May cause irritation to eyes, skin and respiratory tract. May cause irregular heartbeat, difficulty in breathing, dizziness, drowsiness, convulsions, catatonia or coma. Amnesia, dilated pupils, hypoglycemia, hyperkalemia and bronchospasm may also occur. Behavioral and cardiovascular changes could also occur. Allergic reactions may occur. On chronic exposure, digestive disorders such as nausea, vomiting and dry mouth may occur.

Medical Conditions Generally Aggravated by Exposure: Persons with heart disease or conditions; Persons with allergic reaction to beta-adrenergic blocking agents.

BVL Hazard Category: 2

Section IV - FIRST AID MEASURES

Eye Exposure: Flush eyes with large amounts of water for 15 minutes. Seek attention of a physician.

Skin Exposure: Wash eyes with cool, soapy water.

Ingestion: If ingestion occurs, flush mouth with water and seek medical attention immediately. If person is conscious and medical assistance is not available, induce vomiting. Never induce vomiting on an unconscious person.

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

Other medical measures include: Gastric lavage and administration of activated charcoal; administration of atropine for severe bradycardia and hypotension.

Section V - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Approximate to water

Flammable Limits: None **LEL:** NONE **UEL:** NONE

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

Special Fire Fighting Procedures: As with all fires, evacuate personnel to a safe area. Fire fighters should wear self-contained breathing apparatus to avoid smoke inhalation.

Unusual Fire/Explosion Hazards: None

Section VI - ACCIDENTAL RELEASE INFORMATION

Release to Land: Absorb Propranolol with towels or absorbents and dispose of according to federal, state and/or local regulations. Prevent spills from entering sewers or waterways. Wash spill area with bleach (1% solution) and water.

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

Release to Water: Refer to local water authority. Drain disposal is not recommended.

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 up spills. If aerosols are generated, a dust/mist respirator (N 95) must be worn. For larger spills, additional protective clothing such as protective coverall, boots, or double gloves may be needed.

Waste Disposal Method: Incineration at an approved/permitted facility according to local, state and federal guidelines.

Precautions to be taken in handling and storing: Store at room temperature (25°C).

Other Precautions: None

Section VIII - CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Under normal use, respirators are not required. If aerosols of product are generated, a dust/mist respirator (N 95) may be needed. 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: Latex or nitrile

Eye Protection: Safety glasses or goggles

Other Protective Clothing or Equipment: Necessary clothing to prevent skin contact such as a lab coat with a closed front, long sleeves, or elastic cuffs.

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

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical State: Liquid

Appearance and Odor: Clear, colorless solution with no odor

Boiling Point: Approximate to water

Vapor Pressure: Approximate to water

Vapor Density: Approximate to water

Specific Gravity: Approximate to water

Melting Point: Not Applicable

Evaporation Rate: Approximate to water

Solubility in Water: Soluble

pH: 3.0 – 3.8

Section X - STABILITY AND REACTIVITY DATA

Stability: Stable

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

Hazardous Decomposition or Byproducts: When heated, products of combustion may include nitrogen oxides, hydrogen chloride, carbon monoxide, and carbon dioxide.

Hazardous Polymerization: Will not occur

Section XI - TOXICOLOGICAL INFORMATION

For Propranolol Hydrochloride: RTECS # UB7525000

LD₅₀ rat, oral = 466 mg/kg

LD₅₀ rat, intraperitoneal = 76 mg/kg

LD₅₀ rat, subcutaneous = 115 mg/kg

LD₅₀ rat, intravenous = 21 mg/kg

LD₅₀ mouse, oral = 320 mg/kg

LD₅₀ mouse, intraperitoneal = 80 mg/kg

LD₅₀ mouse, subcutaneous = 208 mg/kg

LD₅₀ mouse, intravenous = 18 mg/kg

LD₅₀ rabbit, oral = 600 mg/kg

LD₅₀ rabbit, intravenous = 12.5 mg/m³

Section XII - ENVIRONMENTAL IMPACT INFORMATION

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

Section XIII - DISPOSAL INFORMATION

Dispose of via incineration at an approved/permitted waste disposal facility according to federal, state and local guidelines.

Section XIV - TRANSPORTATION INFORMATION

Propranolol is not a DOT Hazardous Material.
Propranolol 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.
3. BVL Hazard Category Definitions (internal hazard ranking used by Ben Venue Laboratories):
1 = Low Toxicity
2 = Moderate Toxicity
3 = Potent or Toxic
4 = Highly Potent or Toxic
5 = Extremely Potent or Toxic
4. OEL=Occupational Exposure Limit. An internal limit set by Ben Venue Laboratories for the recommended limit of employee exposure to airborne dusts or aerosols that should not be exceeded over an eight-hour time-weighted average.

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