1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Number: 1102433  
Product name: Propranolol Hydrochloride Injection  
Synonyms: Inderal® (Propranolol Hydrochloride)  
Chemical Family: beta-adrenergic blocking agent  
Product Type: Regulated Prescription Drug  
Container Information: 1 ml ampuls  
Product Use: Pharmaceutical  
Supplier: BAXTER HEALTHCARE CORPORATION  
DEERFIELD, ILLINOIS 60015  
(800) 422-9837 or (847) 948-4770  
Emergency telephone number:  
PROSAR: USA (888) 990-0996  OUTSIDE USA (615)917-614  
CHEMTREC: USA (800) 424-9300  OUTSIDE USA (743)741-6089

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Component                  | Weight % | UN Number | Classification |
|---------------------------|----------|-----------|               |
| Propranolol Hydrochloride  | 0.1      | None      | None          |
| 3506-09-0                 |          |           |               |
| Water                     | >99      | None      | None          |
| 7732-18-5                 |          |           |               |

3. HAZARDS IDENTIFICATION

Emergency overview: May be harmful if swallowed.

Principle routes of exposure: Absorbed through skin. Eye contact. Ingestion.

Inhalation: Inhalation not likely under normal use conditions.

Ingestion: May be harmful if swallowed.

Skin contact: May cause irritation and/or allergic reactions.

Eye contact: May cause eye irritation.

4. FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Skin contact: Wash contaminated skin with soap and water. Get medical attention if irritation develops.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

Notes to physician: See patient package insert in shipping carton for complete information.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use foam or all purpose dry chemicals to extinguish.
Special protective equipment for firefighters: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Specific methods: No information available
Flash point: Not determined
Autoignition temperature: Not applicable
Flammable limits in air-lower (%): Not applicable
Flammable limits in air-upper (%): Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5).

Environmental precautions: No information available.

Methods for cleaning up: If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7. HANDLING AND STORAGE

Handling: Wash thoroughly after handling.

Technical measures/precautions:


Incompatible products: No special restrictions on storage with other products.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Product id: 1102433 Product name: Propranolol Hydrochloride Injection
<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA- Time Weighted Average:</th>
<th>OSHA- Short Term Exposure Limit:</th>
<th>OSHA- Ceiling Limits</th>
<th>ACGIH- Time Weighted Average:</th>
<th>ACGIH- Short Term Exposure Limit:</th>
<th>ACGIH- Ceiling Limit Value:</th>
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</thead>
<tbody>
<tr>
<td>Propranolol Hydrochloride</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<td>3506-09-0</td>
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<tr>
<td>Water</td>
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<td>None</td>
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<td>None</td>
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<tr>
<td>7732-18-5</td>
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</tbody>
</table>

**Engineering measures:**
No special containment is required. Good general ventilation should be sufficient to control airborne levels.

**Personal protective equipment:**

**Respiratory protection:** Perform exposure monitoring for this product and its components to ensure that employees are not exposed to levels greater than applicable regulatory limits. If exposure levels exceed regulatory limits, implement a respiratory protection program including respiratory protection that is in compliance with OSHA 29 CFR1910.134 (in the US) or equivalent regulation in other regions. Fire fighting requires the use of a self-contained breathing apparatus with full face piece and positive pressure mode.

**Hand protection:**
Use chemical resistant, impervious gloves.

**Skin and body protection:**
Work uniform or laboratory coat.

**Eye protection:**
Safety glasses.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical state:** Liquid
- **Appearance:** Aqueous solution
- **Color:** Colorless
- **Odor:** Not available.
- **pH:** 3.0 - 3.8
- **Molecular weight:** Not available.
- **Boiling point/range:** Not available.
- **Melting point/range:** Not available.
- **Density:** Not available.
- **Vapor pressure:** Not available.
- **Evaporation rate:** Not available.
- **Solubility:** Not available.
- **Partition coefficient (n-octanol/water):** Not available.
- **Viscosity:** Not available.
- **% Volatile by Volume:** Not available.

### 10. STABILITY AND REACTIVITY

- **Stability:** Stable under recommended storage conditions.
- **Polymerization:** Not applicable
- **Hazardous decomposition products:** Not available.
11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50s and LC50s</th>
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</thead>
<tbody>
<tr>
<td>Propranolol Hydrochloride</td>
<td>Oral LD50 Mouse = 320 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Oral LD50 Rat = 466 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Intravenous LD50 Rat = 21 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Intravenous LD50 Mouse = 18 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Oral LD50 Rabbit = 600 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Intravenous LD50 Rabbit = 12.5 mg/kg</td>
</tr>
<tr>
<td>Water</td>
<td>Oral LD50 Rat: &gt;50000 mg/kg</td>
</tr>
</tbody>
</table>

Acute toxicity: Signs and symptoms of overexposure to beta-adrenergic blocking agents may include low blood pressure, decreased heart rate, atrioventricular block, intraventricular conduction disturbances, cardiogenic shock, pulmonary edema, dizziness, drowsiness, decreased alertness, respiratory depression and apnea, delirium, convulsions, physical rigidity, coma, amnesia, dilated pupils, increased glucose and potassium in blood, bronchospasms, and allergic reactions.

Chronic toxicity: Target organs: heart.

Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. No drug related carcinogenic effects based on animal data.

Mutagenic effects: May be mutagenic. However, data too limited to be conclusive. See patient package insert for additional information.

Reproductive toxicity: No impairment to fertility based on animal data. Considered fetotoxic. See patient package insert for additional information.

FDA Pregnancy Category C

12. ECOLOGICAL INFORMATION

Environmental properties:

<table>
<thead>
<tr>
<th>Component</th>
<th>Ecotoxicity - Water Flea Data</th>
<th>Fish Species Ecotoxicity</th>
<th>Ecotoxicity - Freshwater Algae Data</th>
<th>Microtox Eotoxicity Data</th>
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<tbody>
<tr>
<td>Propranolol Hydrochloride</td>
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<td>None.</td>
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</tbody>
</table>

Ecotoxicity effects: No data available

Bioaccumulation: No data available
13. DISPOSAL CONSIDERATIONS

Waste Classification: Not regulated.

Waste from residues / unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations.

14. TRANSPORT INFORMATION

DOT:
- DOT shipping name: None
- UN Number: None
- DOT Packing Group: None
- DOT Hazard class: None

TDG (Canada):
- TDG Proper shipping name: None
- TDG UN/NA Number: None
- TDG Packing Group: None
- TDG Hazard class: None

ADR/RID:
- ADR Official Transport Name: None
- ADR Proper shipping name: None
- ADR UN/NA number: None
- ADR Hazard Class: None

ICAO / IATA:
- IATA Proper shipping name: None
- IATA UN NUMBER: None
- IATA Primary Hazard: None
- IATA Packing group: None
- ICAO ERG Code: None

IMO / IMDG:
- IMDG Hazard Class and Division: None
- IMDG Proper Shipping Name: None
- IMDG Packing Group: None
- IMDG Subsidiary Risks: None

15. REGULATORY INFORMATION

U.S. Regulations:
- TSCA Inventory List - The product is exempt from TSCA, it is FDA Regulated

OTHER REGULATIONS:
- Japanese Inventory (ENCS) This product does not comply with JPENCS

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight %</th>
<th>RCRA Status:</th>
<th>CERCLA Reportable Quantity:</th>
<th>CERCLA/SARA - 302 Ext. haz. substances:</th>
<th>Listed as Sara 313 title III:</th>
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</thead>
<tbody>
<tr>
<td>Propranolol Hydrochloride</td>
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Product id: 1102433
Product name: Propranolol Hydrochloride Injection
STATE REGULATIONS:

<table>
<thead>
<tr>
<th>Component</th>
<th>California Prop 65:</th>
<th>Minnesota Right-To - Know:</th>
<th>Florida Right-to-Know Reporting List:</th>
<th>Rhode Island Right-to-Know List:</th>
<th>Massachusetts Right-to-Know List:</th>
<th>Pennsylvania Right-to-Know:</th>
<th>New Jersey Right-to-Know:</th>
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CANADIAN REGULATIONS:

Canada DSL Inventory List - This product does not comply with DSL

EU EINECS List - This product complies with EINECS

Risk Phrases:
NONE

Safety Phrases:
NONE

16. OTHER INFORMATION

This data sheet contains changes from the previous version in section(s)?:
None

Additional information:
Not Available.

Prepared by: Technology Resources, Baxter Healthcare Corporation

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End of safety data sheet: