

Isuprel, Isoproterenol Hydrochloride Injection, USP

ISSUED 08/18/98

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
-----MATERIAL NAME: Isuprel, Isoproterenol Hydrochloride Injection, USP
List Number: 1410MANUFACTURER: Hospital Products Division
Abbott Laboratories
Abbott Park, Illinois 60064EMERGENCY TELEPHONE NUMBER: 1-847-937-7970
CHEMTREC TELEPHONE NUMBER: 1-800-424-93002. COMPOSITION/INFORMATION ON INGREDIENTS
-----INGREDIENT NAME: Isoproterenol Hydrochloride *
CAS/RTECS NUMBERS: 51-30-9 / DO1425000
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: 0.1 mcg/m3 skin, eye for isoproterenol (Abbott
Laboratories)
LIMITS STEL: 1 mcg/m3 **
CEILING: N/A

* Hazardous per OSHA criteria

** Up to four excursions allowed, no closer than 1 hour apart, so long
as the 8-hour TWA is maintained.3. HAZARDS INFORMATION
-----EMERGENCY OVERVIEW: In clinical use, this material stimulates the
sympathetic nervous system and the heart. The active ingredient,
isoproterenol hydrochloride is a potent drug. It is toxic by
ingestion, inhalation, and by skin absorption. Target organs include
the heart, cardiovascular system, nervous system, lungs, and eyes.

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3. HAZARDS INFORMATION, continued

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

INGESTION RATING: Possibly toxic

SKIN ABSORPTION RATING: Possibly toxic

INHALATION RATING: Possibly toxic

CORROSIVENESS RATING: N/D

SKIN CONTACT RATING: N/D

SKIN SENSITIZATION RATING: N/D

EYE CONTACT RATING: N/D

TARGET ORGANS: Nervous system, heart, cardiovascular system, lungs,
 eyes

CARCINOGENICITY RATING: NTP: N/L IARC: N/L OSHA: N/L
 ACGIH: N/L
 None

SIGNS AND SYMPTOMS: N/D. In clinical use side effects of isoproterenol include nervousness, insomnia, sweating, restlessness, anxiety, tenseness, fearfulness, excitement or dizziness. Signs of overdose include tachycardia (with resultant coronary insufficiency), palpitations, vertigo, flushing, anginal pain, nausea, tremors, headache, central excitation and blood pressure changes. Other adverse reactions include severe paradoxical airway resistance and cardiac arrest.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/D. Pre-existing cardiac arrhythmias associated with tachycardia, heart disease or known hypersensitivity to sympathomimetic amines.

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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, monitoring cardiovascular function, 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, monitoring cardiovascular function, as necessary.

INGESTION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. No known antidote. Provide symptomatic/supportive care, monitoring cardiovascular function, as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. No known antidote. Provide symptomatic/supportive care, monitoring cardiovascular function, as necessary.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: Non-flammable

FLASH POINT METHOD: N/A

LOWER EXPLOSIVE LIMIT(%): N/D

UPPER EXPLOSIVE LIMIT(%): N/D

AUTOIGNITION TEMPERATURE: N/A

FIRE & EXPLOSION HAZARDS: None.

EXTINGUISHING MEDIA: Use appropriate medium for underlying cause of fire.

FIRE FIGHTING INSTRUCTIONS: Wear protective clothing and self-contained breathing apparatus.

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6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE PROCEDURES: Absorb with suitable material and place into container for disposal in accordance with Section 13.

7. HANDLING AND STORAGE

HANDLING: Protect from light.

STORAGE: Store in cool place between 8-15 deg C (46-59 deg. F).

SPECIAL PRECAUTIONS: Protect from light. Keep in opaque container until use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: No special provisions are required under normal product use.

RESPIRATORY PROTECTION: Not needed during normal product use.

SKIN PROTECTION: If skin contact is likely, impervious gloves are recommended.

EYE PROTECTION: Not required during typical product use conditions.

OTHER PROTECTION: N/D

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Colorless to practically colorless liquid.

ODOR: N/D

BOILING POINT: Water (approx.)

MELTING/FREEZING POINT: Water (approx.)

VAPOR PRESSURE (mm Hg): N/D

VAPOR DENSITY (Air=1): N/D

EVAPORATION RATE: N/D

BULK DENSITY: 1.004 - 1.006 g/mL

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9. PHYSICAL AND CHEMICAL PROPERTIES, continued

SPECIFIC GRAVITY: N/D

SOLUBILITY: Highly soluble in water.

pH: 3.5 - 4.5

VISCOSITY: N/D

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Will turn brownish-pink upon prolonged exposure to air or addition of alkali.

INCOMPATIBILITIES: N/D

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition it emits very toxic fumes of HCl and NOx.

HAZARDOUS POLYMERIZATION: N/D

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY: N/D. LD50 = 450-2220 mg/kg in rats and mice for isoproterenol hydrochloride.

DERMAL TOXICITY: N/D. LD50 (SC) = 0.32-0.6 mg/kg in rats and guinea pigs, 400 mg/kg in mice for isoproterenol.

INHALATION TOXICITY: N/D. An aerosol produced from a 0.41% solution of isoproterenol sulfate was lethal to half the guinea pigs exposed for 40 minutes (concentration not specified). The usual clinical dose of isoproterenol is 0.08 mg by inhalation for asthmatics. A formulation delivering a dose of about 0.4 mg of isoproterenol per inhalation has been associated with increased mortality in asthmatics.

CORROSIVENESS: N/D

DERMAL IRRITATION: N/D

OCULAR IRRITATION: N/D

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11. TOXICOLOGICAL INFORMATION, continued

DERMAL SENSITIZATION: N/D

SPECIAL TARGET ORGAN EFFECTS: N/D. In clinical use, isoproterenol acts on the heart, the smooth muscles of the bronchial tree, skeletal muscle vasculature and the gastrointestinal tract. Large or repeated doses of isoproterenol have caused damage to the heart in animals. Direct application of isoproterenol to the eyes can cause a decrease in intraocular pressure.

CARCINOGENICITY INFORMATION: N/D

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/D

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Dispose of in accordance with local, state and federal regulations.

14. TRANSPORTATION INFORMATION

DOT STATUS: Not Regulated

PROPER SHIPPING NAME: N/D

HAZARD CLASS: N/D

UN NUMBER: N/D

PACKING GROUP: N/D

REPORTABLE QUANTITY: N/D

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14. TRANSPORTATION INFORMATION, continued

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

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

15. REGULATORY INFORMATION

TSCA STATUS: N/A

CERCLA STATUS: N/A

SARA STATUS: N/A

RCRA STATUS: N/A

PROP 65 (CA): N/A

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16. OTHER INFORMATION

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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