



MATERIAL SAFETY DATA SHEET

Product Name: Diphenhydramine Hydrochloride Injection, USP

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Manufacturer Name And Address Hospira, Inc.
275 North Field Drive
Lake Forest, Illinois 60045
USA

Emergency Telephone Hospira, Inc. CHEMTREC: 800 424-9300
224 212-2055

Product Name Diphenhydramine Hydrochloride Injection, USP

Synonyms Benadryl

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name Diphenhydramine Hydrochloride
Chemical Formula C₁₇H₂₂ClNO

Component	Approximate Percent by Weight	CAS Number	RTECS Number
Diphenhydramine Hydrochloride	5	147-24-0	KR7000000
Water	95	7732-18-5	ZC0110000

3. HAZARD INFORMATION

Emergency Overview Diphenhydramine hydrochloride is an antihistamine used for relief of symptoms associated with allergies or colds, and for the treatment of symptoms associated with motion sickness. Toxic by ingestion. May cause nervous system effects.

Occupational Exposure Information from occupational exposure is not available.

Signs and Symptoms The most frequently observed side effects include sedation, sleepiness, breathing difficulty, disturbed coordination, hypotension, gastrointestinal upset and thickened bronchial secretions.

Medical Conditions Aggravated by Exposure Clinical experience suggests narrow-angle glaucoma, peptic ulcers and other gastrointestinal disorders, bladder obstruction, prostatic hypertrophy, asthma, hyperthyroid, cardiovascular disease, hypertension and concurrent use of central nervous system depressants or monoamine oxidase inhibitor therapy.

4. FIRST AID MEASURES

Eye Contact: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

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Skin Contact:	Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
Inhalation:	Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic / supportive care as necessary.
Ingestion:	Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic / supportive care as necessary.

5. FIRE FIGHTING MEASURES

Flammability:	Non-flammable
Fire & Explosion Hazard:	None
Extinguishing Media:	Use extinguishing media appropriate for primary cause of fire.
Special Fire Fighting Procedures	No special provisions required beyond normal fire fighting equipment such as flame and chemical resistant clothing and self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spill Cleanup and Disposal	Absorb with suitable material and dispose of materials according to applicable federal, state, or local regulations.
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7. HANDLING AND STORAGE

Handling	No special handling required.
Storage	No special storage required for hazard control. For product protection store at 20 - 25° C (68 - 77° F).
Special Precautions	No special precautions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	Exposure limits		
	OSHA-PEL	ACGIH-TLV	Hospira EEL
Diphenhydramine Hydrochloride	8 hr TWA: Not Established	8 hr TWA: Not Established	8 hr TWA: 100 mcg/m ³

Notes: OSHA PEL: US Occupational Safety and Health Administration – Permissible Exposure Limit
ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value.
EEL: Employee Exposure Limit.
TWA: 8 hour Time Weighted Average.
STEL: 15-minute Short Term Exposure Limit.

Respiratory Protection	Respiratory protection is not needed during normal product use.
Skin Protection	If contact with unprotected skin is likely, glove use is prudent practice.

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Eye Protection Eye protection is not required during expected product use conditions but may be warranted if eye contact is likely.

Engineering Controls Engineering controls are not needed during normal product use conditions.

9. PHYSICAL/CHEMICAL PROPERTIES

Appearance/Physical State	Clear liquid
Odor	Not Determined
Boiling Point	Approximately that of water (100° C, 212° F)
Freezing Point	Approximately that of water (0° C, 32° F)
Vapor Pressure	Approximately that of water (17.5 mm Hg at 20° C)
Vapor Density (Air=1)	Not Applicable
Evaporation Rate	Not Applicable
Bulk Density	Not Applicable
Density	1.005 g/ml
Solubility	Not Determined
pH	5.7 – 6.5

10. STABILITY AND REACTIVITY

Chemical Stability Stable under standard use and storage conditions.

Incompatibilities May react with strong oxidizing agents.

Hazardous Decomposition Products May emit toxic smoke.

Hazardous Polymerization Will not occur.

11. TOXICOLOGICAL INFORMATION:

Acute Toxicity – Oral:

Ingredient(s)	Percent	Test Type	Value	Units	Species
Diphenhydramine HCL	100	LD50	114-500	mg/kg	Rats, mice, and guinea pigs

LD50 is the dosage producing 50% mortality.

Product contains approximately 5% Diphenhydramine.

Mutagenicity Not Determined

Reproductive Effects No effects identified.

Target Organ Effects Possible target organs include skin, eyes, and the central nervous, gastrointestinal, and cardiovascular systems. In animal studies, there is limited evidence of fetotoxicity and possible cleft palate formation.

12. ECOLOGICAL INFORMATION:

Aquatic Toxicity Not Available

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13. DISPOSAL CONSIDERATIONS:

Waste Disposal	Disposal should be performed in accordance with the federal, state or local regulatory requirements.
Container Handling and Disposal	Dispose of container and unused contents in accordance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

DOT Not Regulated

Notes: DOT - US Department of Transportation Regulations

15. REGULATORY INFORMATION

TSCA Status	Not Regulated
CERCLA Status	Not Regulated
SARA Status	Not Regulated
RCRA Status	Not Regulated
PROP 65 (Calif.)	Not Regulated

Notes: TSCA Toxic Substance Control Act
CERCLA, US EPA law, Comprehensive Environmental Response, Compensation, and Liability Act
SARA Superfund Amendments and Reauthorization Act
RCRA US EPA, Resource Conservation and Recovery Act
Prop 65, California Proposition 65

16. OTHER INFORMATION:

MSDS Coordinator	Global Occupational Toxicology
Date Prepared	September 15, 2005
Date Revised	October 21, 2008

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