Product Name: Cimetidine Hydrochloride Injection

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

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

Note: Hospira, formerly the Hospital Products Division of Abbott Laboratories, was
created as an independent company in May 2004.

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

Product Name               Cimetidine Hydrochloride Injection
Synonyms                   None

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name            Cimetidine Hydrochloride
Chemical Formula           C_{10}H_{17}N_{6}SCl

<table>
<thead>
<tr>
<th>Component</th>
<th>Approximate Percent by Weight</th>
<th>CAS Number</th>
<th>RTECS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cimetidine Hydrochloride</td>
<td>15</td>
<td>70059-30-2</td>
<td>MF0035100</td>
</tr>
<tr>
<td>Water</td>
<td>85</td>
<td>7732-18-5</td>
<td>ZC0110000</td>
</tr>
</tbody>
</table>

3. HAZARD INFORMATION

Emergency Overview
In clinical use, this material is used to treat ulcers. Target organs include the
gastrointestinal tract, reproductive system, liver and central nervous system.

Occupational Exposure
Potential
Information on the absorption of this compound via ingestion,
inhalation or skin contact is not available. Avoid liquid aerosol generation and
skin contact with solution.

Signs and Symptoms
No signs or symptoms from occupational exposure are known. Clinical data
suggests the following: diarrhea, dizziness, sleep, headaches, confusion,
agitation, rash, elevated white blood cells.

Medical Conditions
Aggravated by Exposure
Hypersensitivity to the material and/or similar materials. Pre-existing
gastrointestinal system, endocrine system, liver, and male reproductive system
ailments.
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.

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 the underlying 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 liquid with suitable material and clean affected area with soap and water. Dispose of materials according to the applicable federal, state, or local regulations.

7. HANDLING AND STORAGE

Handling: No special handling required.

Storage: No special storage required for hazard control. For product protection store at controlled room temperature of 15-30°C (59-86°F).

Special Precautions: Protect from freezing and extreme heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td>Cimetidine Hydrochloride</td>
<td>8 hr TWA: Not Established</td>
</tr>
</tbody>
</table>

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.
Product Name: Cimetidine Hydrochloride Injection

Respiratory Protection
Respiratory protection is not needed during normal product use.

Skin Protection
If solution contact with unprotected skin is likely, use of impervious gloves is a prudent practice.

Eye Protection
Eye protection is not required during expected product use conditions but may be warranted should a splash potential exist.

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

9. PHYSICAL/CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Physical State</td>
<td>Clear solution</td>
</tr>
<tr>
<td>Odor</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Approximately that of water (100 ºC, 212 ºF).</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Approximately that of water (0 ºC, 32 ºF).</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Approximately that of water (17.5 mm Hg at 20 ºC).</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>1.003-1.005 g/mL at 25°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Approximately that of water (1.0)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water</td>
</tr>
<tr>
<td>pH</td>
<td>5.0 – 7.0</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical Stability
Stable under standard use and storage conditions.

Incompatibilities
None

Hazardous
Toxic fumes of nitrogen and sulfur oxides

Decomposition Products
None

11. TOXICOLOGICAL INFORMATION:

Acute Toxicity:

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Percent</th>
<th>Test Type</th>
<th>Value</th>
<th>Units</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cimetidine Hydrochloride</td>
<td>100</td>
<td>LD50</td>
<td>2550</td>
<td>mg/kg</td>
<td>Mice, Rats, Hamsters, Rabbits, Dog</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt;8640</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LD50 is the dosage producing 50% mortality.
Product contains approximately 15% Cimetidine Hydrochloride.

Mutagenicity
Not Determined

Target Organ Effects
In clinical use target organ effects include the gastrointestinal tract, reproductive system, liver and central nervous system.

12. ECOLOGICAL INFORMATION:

Aquatic Toxicity
Not determined.
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**: T. Straits MPH, CIH
- **Date Prepared**: September 15, 2005

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