MATERIAL SAFETY DATA SHEET

Product Name: Chloroprocaine Hydrochloride Injection, USP

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Manufacturer Name 
Hospira, Inc.
And Address 
275 North Field Drive
Lake Forest, Illinois  60045
USA
Emergency Telephone 
CHEMTREC:  800 424-9300
Hospira, Inc. 
224 212-2055
Product Name 
Chloroprocaine Hydrochloride Injection, USP
Synonyms 
None

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name 
Chloroprocaine Hydrochloride
Chemical Formula 
C_{13}H_{20}Cl_{2}N_{2}O_{2}

<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>Chloroprocaine Hydrochloride</td>
<td>2</td>
<td>3858-89-7</td>
<td>DG1575200</td>
</tr>
<tr>
<td>Water</td>
<td>98</td>
<td>7732-18-5</td>
<td>ZC0110000</td>
</tr>
</tbody>
</table>

3. HAZARD INFORMATION

Emergency Overview 
In clinical use, this material causes numbness of the skin. The active ingredient is considered to be toxic by ingestion. Target organs include the skin, nervous system, central nervous system, cardiovascular system, and respiratory 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. In clinical use, effects include numbness, restlessness, anxiety, dizziness, tinnitus, blurred vision, tremors, convulsions, drowsiness, hypotension, bradycardia, ventricular arrhythmias, respiratory arrest and cardiac arrest.

Medical Conditions Aggravated by Exposure 
Data suggest pre-existing central nervous system or cardiovascular ailments. Hypersensitivity to ester-type local anesthetics. Concurrent use of sulfonamides or cholinesterase inhibitors
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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 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 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>Exposure Guidelines</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td>Chloroprocaine 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.
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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 liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Approximately that of water (100 °C, 212 °F).</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Approximately that of water (0°C, 32 °F).</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Approximately that of water (17.5 mm Hg at 20 °C).</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>Not Applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Approximately that of water (1.0).</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>pH</td>
<td>2.7 - 4.0</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical Stability  Stable under standard use and storage conditions.

Incompatibilities  None

Hazardous Decomposition Products  Oxides of nitrogen and HCL.

Hazardous Polymerization  None

11. TOXICOLOGICAL INFORMATION:

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>Chloroprocaine Hydrochloride</td>
<td>100</td>
<td>LD50</td>
<td>200</td>
<td>mg/kg</td>
<td>Rats</td>
</tr>
<tr>
<td></td>
<td></td>
<td>175</td>
<td></td>
<td></td>
<td>Mice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 (iv)</td>
<td>65-97</td>
<td>mg/kg</td>
<td>Mice, Guinea Pigs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 (sc)</td>
<td>700-950</td>
<td></td>
<td>Mice</td>
</tr>
</tbody>
</table>

LD50 is the dosage producing 50% mortality.
LD50 (iv) is the intravenous dosage that produces 50% mortality.
LD50 (sc) is the value for skin contact.
Product contains approximately 2% Chloroprocaine Hydrochloride.

Mutagenicity  Not Determined.

Target Organ Effects  In clinical use target organ effects include skin, cardiovascular system, respiratory, central nervous system.
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12. ECOLOGICAL INFORMATION:

Aquatic Toxicity
Not Available

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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