MATERIAL SAFETY DATA SHEET

Product Name: Succinylcholine Chloride Injection, USP

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

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

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

Product Name: Succinylcholine Chloride Injection, USP
Synonyms: Quelicin®

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name: Succinylcholine Chloride
Chemical Formula: C_{14}H_{30}Cl_{2}N_{2}O_{4}

<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>Succinylcholine Chloride</td>
<td>2 - 10</td>
<td>71-27-2</td>
<td>GA2360000</td>
</tr>
<tr>
<td>Water</td>
<td>90 - 98</td>
<td>7732-18-5</td>
<td>ZC0110000</td>
</tr>
</tbody>
</table>

3. HAZARD INFORMATION

Emergency Overview: In clinical use, this material produces relaxation of skeletal muscles. Possible target organs include the parasympathetic nervous system, the cardiovascular system, respiratory system, the eyes, and possibly the fetus.

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.

Signs and Symptoms: No signs or symptoms from occupational exposure are known. Clinical data suggest the following: incoordination, muscle weakness, breathing difficulty, hyperthermia, increased intraocular pressure.

Medical Conditions Aggravated by Exposure: Hypersensitivity to the material and/or similar materials. Pre-existing ailments in the following organs: muscle, liver, eyes, cardiovascular system.
Product Name: Succinylcholine Chloride Injection, USP

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:

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 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 in refrigerator 2° to 8°C (36° to 46°F).

Special Precautions: None required for hazard control.

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>Succinylcholine Chloride</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: Succinylcholine Chloride Injection, USP

8. EXPOSURE CONTROLS/PERSONAL PROTECTION: continued

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>Not Determined</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 Determined</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Approximately that of water (1.0)</td>
</tr>
<tr>
<td>Solubility Aqueous Solution</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>3.0 – 4.5</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical Stability
Stable under standard use and storage conditions.

Incompatibilities
Alkaline agents

Hazardous
Toxic fumes of Cl and oxides of nitrogen.

Decomposition Products
Not Determined.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity – Oral:

<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>Succinylcholine Chloride</td>
<td>100</td>
<td>LD50</td>
<td>125</td>
<td>mg/kg</td>
<td>Mice</td>
</tr>
</tbody>
</table>

LD50 is the dosage producing 50% mortality.
Product contains between approximately 2-10% Succinylcholine Chloride.

Mutagenicity
Not Determined

Target Organ Effects
In clinical use target organ effects include parasympathetic nervous system, the cardiovascular system, respiratory system, the eyes, and possibly the fetus.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity
Not Available

3
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


16. OTHER INFORMATION

MSDS Coordinator  Global Occupational Toxicology
Date Prepared  September 15, 2005
Dates Revised  October 21, 2008  August 24, 2010

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