Section 1. Product and Company Identification

Product Name: Bupivacaine Hydrochloride Monohydrate
Product ID: B8262
Chemical Name: Bupivacaine hydrochloride monohydrate; Carbostesin; Marcaine; Sensorcaine
Supplier: LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone #: 1-800-424-9300

Section 2. Hazards Identification

GHS Classification
Acute toxicity, Oral (Category 2), H300
Acute toxicity, Inhalation (Category 1), H330
Acute toxicity, Skin (Category 2), H310

GHS Label elements including precautionary statements

Pictogram
Signal word: Danger
Hazard and precautionary statements
H300 + H310 + H330 - Fatal if swallowed, in contact with skin or if inhaled.

Precautionary statements
P260 - Do not breathe dust, fumes, gas, mist, vapors and spray.
P262 - Do not get in eyes, on skin or on clothing.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/ protective clothing.
P284 - Wear respiratory protection.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P320 - Specific treatment is urgent (see supplemental first aid instructions on this label).
P330 - Rinse mouth.
P361 - Remove or take off immediately all contaminated clothing.
P363 - Wash contaminated clothing before reuse.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification
Health hazard: 4
Chronic health hazard: *
Flammability: 0
Physical hazard: 0

NFPA Rating
Health hazard: 4
Fire hazard: 0
Reactivity hazard: 0

Potential Health Effects
Inhalation - Acute toxicity. Fatal if inhaled. May cause respiratory irritation.
Skin - Acute toxicity. Fatal in contact with skin. May cause skin irritation.
Eyes - May cause eye irritation.
Ingestion - Acute toxicity. Fatal if swallowed.

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Formula</th>
<th>Formula Wt.</th>
<th>CAS No.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C_{18}H_{28}N_{2}O • HCl • H_{2}O</td>
<td>342.91</td>
<td>73360-54-0</td>
<td>241-917-8</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Eye Contact
Flush eyes with water as a precaution.

Skin Contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5. Firefighting Measures

Flash Point
Not available.

Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Firefighting Procedures
Wear self-contained breathing apparatus for fire fighting if necessary.

Unusual Fire Hazards
Carbon oxides, nitrogen oxides (NOx), and hydrogen chloride gas.

Section 6. Accidental Release Measures

Personal Precautions
Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: Ambient

Hazardous Decomposition Products
Not available.

Other Remarks

Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**EXPOSURE CONTROLS**
Contains no substances with occupational exposure limit values.

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**PERSONAL PROTECTION**

**Eye/face protection**: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection**: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full and Splash contact - Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min., Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M).

**Body Protection**: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>White crystal powder</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Solubility</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble in water. Slightly soluble in acetone, chloroform, and ether.</td>
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<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Ignition temperature</th>
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<tbody>
<tr>
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<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Lower explosion limit</th>
<th>Autoignition temperature</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Upper explosion limit</th>
<th>Vapor pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Water solubility</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble in water.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative vapor density</th>
<th>Evaporation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

**Stability**
Stable under recommended storage conditions.

**Materials To Avoid**
Strong oxidizing agents.

**Hazardous Decomposition Products**
Not available.
Section 11. Toxicological Information

**Oral LD50**  Rabbit - 18 mg/kg

**Inhalation LC50**  Not available.

**Dermal LD50**  Not available.

**Other information on acute toxicity**  Not available.

**Skin corrosion/irritation**  Not available.

**Serious eye damage/irritation**  Not available.

**Respiratory or skin sensitization**  Not available.

**Germ cell mutagenicity**  Not available.

**Carcinogenicity**
- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive Toxicity**  Not available.

**Teratogenicity**  Not available.

**Specific organ toxicity**
- **single exposure (GHS)**  Not available.
- **repeated exposure (GHS)**  Not available.

**Aspiration Hazard**  Not available.

**Synergistic effects**  Not available.

**RTECS:** TK6125000

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**Additional Information**

**Potential Health Effects**
- Inhalation - Acute toxicity. Fatal if inhaled. May cause respiratory irritation.
- Skin - Acute toxicity. Fatal in contact with skin. May cause skin irritation.
- Eyes - May cause eye irritation.
- Ingestion - Acute toxicity. Fatal if swallowed.

**Signs and symptoms of exposure**

Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Section 12. Ecological Information

**Toxicity**  Not available.

**Mobility in soil**  Not available.

**PBT and vPvB assessment**  PBT/vPvB assessment not available as chemical safety assessment not required/ not
Section 13. Disposal Considerations

**Waste Disposal**

Dispose of material according to all federal, state, and local regulations. Offer material to a licensed, professional waste disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an after burner and scrubber. Dispose of as unused product.

Section 14. Transport Information

**DOT (US)**

- UN number: 2811
- Class: 6.1
- Packing group: II
- Proper shipping name: Toxic solids, organic, n.o.s. (Bupivacaine Hydrochloride Monohydrate)
- Marine pollutant: No
- Poison inhalation hazard: No

**IATA**

- UN number: 2811
- Class: 6.1
- Packing group: II
- Proper shipping name: Toxic solids, organic, n.o.s. (Bupivacaine Hydrochloride Monohydrate)

**IMDG**

- UN number: 2811
- Class: 6.1
- Packing group: II
- EMS No: F-A, S-A
- Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Bupivacaine Hydrochloride Monohydrate)
- Marine pollutant: No

Further Information

Section 15. Regulatory Information

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Components**

Acute health hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

- Bupivacaine Hydrochloride Monohydrate
- CAS #: 73360-54-0
- Revision Date:

**New Jersey Right To Know Components**

- Bupivacaine Hydrochloride Monohydrate
- CAS #: 73360-54-0
- Revision Date:

**California Prop 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

**Other information**

The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.