Section 1. Product and Company Identification

**Product Name**
Quinacrine Dihydrochloride Dihydrate

**Product ID**
Q8133

**Chemical Name**
Atabrine hydrochloride; RP-866; SN-390

**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 4), H302
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

GHS Label elements including precautionary statements

**Pictogram**
⚠️

**Signal word**
Warning

**Hazard and precautionary statements**

**Hazard statements**
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.

**Precautionary statements**

P261 - Avoid breathing dust, fumes, gas, mist, vapors and spray.
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/ eye protection/ face protection.
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER or doctor/ physician if you feel unwell.
P321 - Specific treatment (see supplemental first aid instructions on this label).
P330 - Rinse mouth.
P332 + P313 - If skin irritation occurs: Get medical advice/ attention.
P337 + P313 - If eye irritation persists: Get medical advice/ attention.
P362 - Take off contaminated clothing and wash before reuse.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P501 - Dispose of contents/ container to an approved waste disposal plant.

**HMIS Classification**
Health hazard: 2
Chronic health hazard: *
Flammability: 0
Physical hazard: 0

**NFPA Rating**
Health hazard: 2
Fire hazard: 0
Reactivity hazard: 0

**Potential Health Effects**
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: May cause eye irritation.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Formula</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C23H30ClN3O • 2HCl • 2H2O</td>
<td>6151-30-0</td>
</tr>
<tr>
<td>Formula Wt.</td>
<td>EC No.</td>
</tr>
<tr>
<td>508.92</td>
<td></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
Remove contact lenses. Flush with water for at least 15 minutes and consult a physician immediately.

Skin Contact
Wash with soap and water for 15 minutes and consult a physician immediately. Wash contaminated clothing before use.

Inhalation
Remove from exposure and provide respiration support if necessary. Consult a physician.

Ingestion
Rinse mouth with water. Consult a physician or poison control immediately.

Section 5. Firefighting Measures

Flash Point
Not available.

Extinguishing Media
Water spray, dry chemical powder, carbon dioxide, polymer foam.

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

Unusual Fire Hazards
May emit toxic fumes.

Section 6. Accidental Release Measures

Personal Precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions
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. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. 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
Carbon monoxide, carbon dioxide, nitrogen oxides (NOx) and hydrogen chloride gas.

Other Remarks
None
Section 8. Exposure Controls/Personal Protection

Personal protective equipment

CONTROL PARAMETERS
Contains no substances with occupational exposure limit values.
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTIVE EQUIPMENT

Eye/face protection: Safety glasses with side-shields conforming to EN 166. 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: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection, use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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>Bright yellow powder.</td>
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</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Volatility</th>
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<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
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<table>
<thead>
<tr>
<th>Melting Point</th>
<th>Density</th>
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</thead>
<tbody>
<tr>
<td>248°C-250°C(dec)</td>
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</table>

Solubility

Soluble in hot water. Slightly soluble in ethanol, methanol or water. Insoluble in ether, benzene or acetone.

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Ignition temperature</th>
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</thead>
<tbody>
<tr>
<td>Not available.</td>
<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>
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<tr>
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<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Water solubility</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble in hot water.</td>
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</table>

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

<table>
<thead>
<tr>
<th>Relative vapor density</th>
<th>Evaporation rate</th>
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</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

Keep Away from heat, strong oxidizing agents and strong acids.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, nitrogen oxides (NOx) and hydrogen chloride gas.
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th></th>
<th>Oral LD50</th>
<th>Skin corrosion/irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral - rat - 660 mg/kg</td>
<td></td>
<td>Not available.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Inhalation LC50</th>
<th>Serious eye damage/irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td></td>
<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Dermal LD50</th>
<th>Respiratory or skin sensitization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td></td>
<td>Not available.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Other information on acute toxicity</th>
<th>Germ cell mutagenicity</th>
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</thead>
<tbody>
<tr>
<td>Not available.</td>
<td></td>
<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Reproductive Toxicity</th>
<th>Aspiration Hazard</th>
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<td>Not available.</td>
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<table>
<thead>
<tr>
<th></th>
<th>Specific organ toxicity single exposure (GHS)</th>
<th>Synergistic effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation - May cause respiratory irritation.</td>
<td>Not available.</td>
<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Specific organ toxicity repeated exposure (GHS)</th>
<th>Additional Information</th>
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<tr>
<td>Not available.</td>
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<td>RTECS: AR7875000</td>
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<table>
<thead>
<tr>
<th></th>
<th>Teratogenicity</th>
<th>Signs and symptoms of exposure</th>
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</thead>
<tbody>
<tr>
<td>Not available.</td>
<td></td>
<td>To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.</td>
</tr>
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</table>

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th></th>
<th>Toxicity</th>
<th>Mobility in soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td></td>
<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>PBT and vPvB assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT/vPvB assessment not available as chemical safety assessment not required/not available</td>
<td></td>
</tr>
</tbody>
</table>
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 to dispose of as unused product.

Section 14. Transport Information

**DOT (US)**
- Not dangerous goods.

**IATA**
- Not dangerous goods.

**IMDG**
- Not dangerous goods.

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**
- Quinacrine Dihydrochloride Dihydrate, CAS #: 6151-30-0, Revision Date:

**New Jersey Right To Know Components**
- Quinacrine Dihydrochloride Dihydrate, CAS #: 6151-30-0, 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.