Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

**Catalog Number:**
1825, 1826, 1828, 1830, C-118, C-119, C021500, CX-1088, R1830600, SC021500

**Product Identity:**
CALMAGITE INDICATORS, AQUEOUS

**Manufacturer's Name:**
RICCA CHEMICAL COMPANY LLC

**Emergency Contact(24 hr) -- CHEMTREC®**
Domestic: 800-424-9300
International: 703-527-3887

**CAGE Code:** 4TCW6, 0V553, 4XZQ2

**Address:**
448 West Fork Dr
Arlington, TX 76012

**Telephone Number For Information:**
817-461-5601

**Date Prepared:**
10/10/00

**Revision:** 7
Last Revised: 07/2010
Date Printed: 10/31/2012 7:34:12 am

Section 2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Registry #</th>
<th>Concentration</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calmagite</td>
<td>3147-14-6</td>
<td>0.01 - 1.0</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Water, Deionized</td>
<td>7732-18-5</td>
<td>Balance</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Section 3: Hazard Identification

**Emergency Overview:** Non-flammable, non-toxic, non-corrosive. Does not present any significant health hazards. May cause irritation. Wash areas of contact with water.

**Target Organs:** eyes, skin.

**Eye Contact:** May cause slight irritation.

**Inhalation:** Not likely to be hazardous by inhalation.

**Skin Contact:** May cause slight irritation.

**Ingestion:** Large doses may cause stomach upset and nausea.

**Chronic Effects/Carcinogenicity:** None
  - IARC - No.
  - NTP - No.
  - OSHA - No.

**Reproductive Information:** Not Applicable.

**Teratology (Birth Defect) Information:** Not Applicable.
Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Skin Contact: Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops.
Ingestion: Dilute with water or milk. Call a physician if necessary.

Section 5: Fire Fighting Measures

Flash Point: Not Available.  
LFL: Not Available.  
Extinguishing Media: Use any means suitable for extinguishing surrounding fire.  
Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.  
Fire Fighting Instructions: Use normal procedures/instructions.  
Fire Fighting Equipment: Use protective clothing and breathing equipment appropriate for the surrounding fire.

Section 6: Accidental Release Measures

Collect liquid and dilute with water. Release to drain if local regulations allow. For larger spills, absorb with suitable material (vermiculite, clay, etc.). Collect the solid residue and save for disposal.

Section 7: Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.
Safety Storage Code: General

Section 8: Exposure Control/Personal Protection

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.
Respiratory Protection: Normal room ventilation is adequate.
Skin Protection: Chemical resistant gloves.
Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties

Appearance: Clear, red colored liquid
Odor: characteristic Calmagite odor
Solubility in Water: Infinite
Specific Gravity: Approximately 1
pH: Not Available.
Boiling Point(°C): Approximately 100
Melting Point(°C): Approximately 0
Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.
Incompatibility: None identified.
Hazardous Decomposition Products: None identified.
Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

No LD50 information available in ‘Registry of Toxic Effects of Chemical Substances’.

Section 12: Ecological Information

Ecotoxicological Information: No information found.
Chemical Fate Information: No information found.
Section 13. Disposal Considerations
Dilute with water, then flush to sewer if local regulations allow. If not allowed, save for recovery or recycling in an approved waste disposal facility. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers:

This product is not regulated.

Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

OSHA Status: The above items either do not contain any specifically hazardous material or the potentially hazardous material is present in such low concentration that the items do not present any immediate threat to health and safety. These items do not meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:
- Section 302 Extremely Hazardous Substances: Not Applicable.
- Section 311/312 Hazardous Categories: No
- Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.
Pennsylvania: None Reported.
RCRA Status: Not Applicable.

CERCLA Reportable Quantity: None Reported.

WHMIS: Not Applicable.

Section 16. Other Information

NFPA Ratings:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Special Notice Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>None</td>
</tr>
</tbody>
</table>

HMIS Ratings:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>B (Protective Eyewear, Gloves)</td>
</tr>
</tbody>
</table>

Rev 1, 09-29-2005: (Section 1) added catalog number CX-1048; (Section 2) revised concentration of Calmagite from < 0.2%.
Rev 2, 03-01-2006: (Section 1) added catalog number C-118; (Section 2) revised concentration of Calmagite from 0.1 - 1.0%; (Section 9) revised odor from odorless.
Rev 3, 12-25-2008: reviewed and approved for distribution.
Rev 4, 07-21-2010: (Section 1) added catalog number R1830600.
When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.