1. IDENTIFICATION

Product Identifier

Product Name  D LIME

Other means of Identification

SDS#  BC.DLI-1017

UN/ID No  UN1805

Recommended Use of the Chemical and Restrictions on Use

Recommended Use  Lime and Scale Remover

Details of the Supplier of the Safety Data Sheet

Supplier Address

Butler Chemicals, Inc
3070 E. Ceena Ct.
Anaheim, CA 92806

Emergency Telephone Number

Company Phone Number  (800) 331-3643

Emergency Telephone (24 hr.)  INFOTRAC
1-352-323-3500 (International)
1-800-535-5053 (North American)
2. HAZARDS IDENTIFICATION

Appearance: Green  Physical State: Liquid  Odor: Non-specific, no fragrance added

Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 1C</td>
</tr>
<tr>
<td>Eye Damage</td>
<td>Category 1</td>
</tr>
<tr>
<td>Corrosive to Metals</td>
<td>Category 1</td>
</tr>
<tr>
<td>-</td>
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</tbody>
</table>

Signal Word
DANGER

Hazard Statements
Causes severe skin burns and eye damage.

Precautionary Statements – Prevention
Wear chemical-splash goggles, chemical-resistant protective gloves, and footwear. Avoid contact with eyes, skin and clothing. Do not breathe vapors or mist. Do not eat, drink or smoke when using this product.
KEEP OUT OF THE REACH OF CHILDREN.

Precautionary Statements Response
IF IN EYES: Rinse continuously with copious amounts of water for several minutes. Contact physician immediately.
IF ON SKIN: Take off contaminated clothing immediately. Rinse skin with water for several minutes. Seek medical attention if needed.
IF INGESTED: Rinse mouth. DO NOT INDUCE VOMITING. If conscious drink milk or water to dilute if tolerated.
IF INHALED: Remove person from contaminated area, and move to fresh air. Seek medical attention.

Precautionary Statements – Storage
Store in the original corrosive resistant container. Store in a well ventilated storage area. Keep locked up.
KEEP OUT OF REACH OF CHILDREN

Precautionary Statements – Disposal
Dispose of contents and container in accordance with federal, state, and local laws.

Other Hazards
KEEP OUT OF REACH OF CHILDREN.
Harmful to marine life.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROCHLORIC ACID 38%</td>
<td>7647-01-0</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td>PHOSPHORIC ACID 75%</td>
<td>7664-38-2</td>
<td>&lt; 15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
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</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

First Aid Measures

IF IN EYES: Rinse cautiously with water for several minutes. Contact a physician immediately.

IF ON SKIN: Take off contaminated clothing immediately. Rinse skin with water for several minutes. Seek medical attention if needed.

IF INGESTED: Rinse mouth. DO NOT INDUCE VOMITING. If conscious drink milk or water to dilute if tolerated.

IF INHALED: Remove person from contaminated area, and move to fresh air. Seek medical attention.

Most Important Symptoms and Effects

Symptoms: Can cause severe burns to skin and eyes. May cause blindness without immediate first aid. May cause irritation to respiratory system if concentrated vapors are inhaled. Harmful if swallowed. Can cause serious burns to mouth, throat, and stomach.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically
5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
CO₂ or foam. Select an extinguisher suitable to fire size.

**Unsuitable Extinguishing Media**
No restrictions based on chemical hazards

**Specific Hazards Arising from the Chemical**
No known hazards.

**Hazardous Products Arising from Combustion:**
Oxides of carbon and other fumes.

**Protective equipment and precautions for firefighters**
Wear a Self-Contained Breathing Apparatus and full protective gear as conditions warrant.

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions**
Avoid contact with eyes and skin, spill may cause surface to become slippery. Clean up immediately using best management practices guide.

**Eye/Face Protection:**
Anti-splash safety goggles.

**Skin and Body Protection:**
Chemical resistant rubber gloves, apron, or lab coat

**Respiratory Protection:**
Wear a suitable respirator, when mist or vapors are present.

**Environmental Precautions**
Prevent spill from entering into drains, sewers, or surface water ways.

**Methods and Material for containment and cleaning up**

**Methods for Containment**
Dike area to contain spill

**Methods for Clean-up**
Pump spilled product into a properly labeled container. Absorb remaining products with approved absorbent or sand. Place in an approved container for proper disposal. Always dispose of waste in accordance with all federal, state, and local laws.

7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**
Handle in accordance with good industrial hygiene and safety practices. Use personal protection as recommended in Section 8. Avoid contact with skin, and eyes. Avoid inhalation of concentrated vapors.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**
Keep away from incompatible materials. Store in original corrosive resistant container. Store in a well ventilated storage area. Keep locked up. KEEP OUT OF THE REACH OF CHILDREN.

**Incompatible Materials**
Oxidizers, Bleach.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate Engineering Controls

Engineering Controls
None required. General room ventilation is typically adequate.

Individual protection measures, such as personal protective equipment

Eye/face Protection
Anti-splash safety goggles.

Skin and Body Protection
Chemical resistant rubber gloves, apron, or lab coat

Respiratory Protection
Wear a suitable respirator, when concentrated mist or vapors are present.

General Hygiene Considerations
Wash contaminated clothing before reuse. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks · Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Green Liquid</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Non-specific, no fragrance added</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Green</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Melting Point/ Freezing Point</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/ Boiling Range</td>
<td>Approx. 212°F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
<td>(mm GHZ)</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.08</td>
<td>(H₂O = 1)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
Mixing with incompatibles can release heat, and gases.

Chemical Stability
Stable under normal conditions.

Possibility of Hazardous Reactions
Stable under normal conditions

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to Avoid
Contact with Bleach, amphoteric metals, excessive heat, and direct sunlight.

Incompatible Materials
Bleach. Amphoteric metals.

Hazardous Decomposition Products
None known based on information supplied.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Corrosive Liquid

Eye Contact
Can cause severe burns to eyes and surrounding tissue.

Skin Contact
Can cause severe burns to skin.

Inhalation
Can cause severe burns to nose, throat, and respiratory system.

Ingestion
Can cause serious damage to mouth, throat, and stomach.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms
Can cause severe burns to skin and eyes. May cause blindness without immediate first aid. May cause irritation to respiratory system if concentrated vapors are inhaled. Harmful if swallowed. Can cause serious burns to mouth, throat, and stomach.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity
The table below indicated whether each agency has listed any ingredient as a carcinogen. However, the product as whole has not been tested. Group 3 IARC components are “not classifiable as human carcinogens”.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

IARC (International Agency for Research on Cancer)
N/A

Numerical Measures of toxicity
N/A
### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Harmful to marine life.

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/ Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Persistence/Degradability**
N/A

**Bioaccumulation**
N/A

**Mobility**
N/A

**Other Adverse Effects**
N/A
13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Dispose of contents in accordance with federal, state, and local laws.

Contaminated Packaging
Dispose of container in accordance with federal, state, and local laws.

14. TRANSPORT INFORMATION

DOT / IMDG / TDG:
UN1805, PHOSPHORIC ACID SOLUTION
CORROSIVE LIQUIDS, N.O.S., CLASS 8, PGIII

15. REGULATORY INFORMATION

International Inventories
Not Determined

US Federal Regulations

This material, as supplied, contains one or more substances regulated as a hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROCHLORIC ACID 38% 7647-01-0</td>
<td>N/R</td>
<td>N/R</td>
<td>1,000 lbs.</td>
</tr>
<tr>
<td>PHOSPHORIC ACID 75% 7664-38-2</td>
<td>N/R</td>
<td>N/R</td>
<td>1,000 lbs.</td>
</tr>
<tr>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

EPA CERCLA RQ:           NO
EPA REGISTERED:          NO
OSHA HAZARDOUS:          YES
SARA 311/312 HAZARDS:    ACUTE

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal regulations, Part 372

US State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals.
### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>C</td>
</tr>
</tbody>
</table>

**Issue Date**  
5/08/2015

**Revision Date**  
5/04/2015

**Revision Note**  
Prepared by RD

**Disclaimer**
This Safety Data Sheet has been prepared using data from sources considered technically reliable to the best of our knowledge. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. The information given is designed only as guidance for safe handling, use, storage, transportation, and disposal and may not be considered a warranty or quality specification. Actual conditions of use and handling are beyond the Seller's control.

*End of Safety Data Sheet*