1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: Liquid Glug - Kitchen
Intended Use: Unclogging kitchen drains

Manufacturer: Hercules Chemical Company, Inc.
111 South Street
Passaic, New Jersey 07055-7398

Information Telephone: (800) 221-9330
Internet: http://www.herchem.com

Emergency Phone: CHEMTREC: (800) 424-9300

MSDS Date of Preparation: 04/21/06

2. HAZARDS IDENTIFICATION

This product is a clear, colorless liquid, no odor.

Emergency Overview
Corrosive.
May cause severe eye damage.
May cause skin burns.
Inhalation of mists may cause mucous membrane and respiratory irritation and burns with possible pulmonary edema.
May be fatal if swallowed.

Primary route of Exposure: Inhalation, skin
Ingestion: Ingestion may cause erosion of the mucous membranes, esophagus and stomach with shock and possible perforation and peritonitis. May be fatal.
Inhalation: Inhalation of mists may cause severe irritation of the nose throat and upper respiratory tract. Severe exposures may cause pulmonary edema and death.
Eye: Corrosive. Liquid or mists may cause severe irritation or burns with redness, tearing and stinging of the eyes. May cause permanent eye damage.
Skin: Liquid or mists may cause severe irritation and burns with scarring.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>10-30%</td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>1310-58-3</td>
<td>3-7%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>60-100%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Eye:** Immediately flush victim's eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Remove contact lenses if present. Washing eyes within 1 minute is essential to achieve maximum effectiveness. Get immediate medical attention.

**Skin:** Immediately flush skin with plenty of water for 15 minutes while removing contaminated clothing and shoes. Get medical attention. Launder clothing before re-use. (Discard contaminated shoes).

**Ingestion:** DO NOT INDUCE VOMITING. If conscious, rinse mouth thoroughly with cold water. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

**Inhalation:** Immediately remove victim to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

**Other:** Not applicable

5. FIRE FIGHTING MEASURES

**Flash Point:** None

**Auto ignition Temperature:** Not applicable

**Flammable Limits:**
- LEL: Not applicable
- UEL: Not applicable

**Extinguishing Media:** Use media appropriate for surrounding fire. Cool fire exposed containers and structures with water.

**Unusual Fire or Explosion Hazards:** Reacts with most metals to form flammable hydrogen gas.

**Special Fire-Fighting Instructions:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

**Explosion Data:** (sensitivity to mechanical impact or static discharge): None known.

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective clothing as described in Section 8. For small spill, flush with large amount of water. For larger spill, contain liquid and neutralize with dilute acid such as acetic or hydrochloric. Flush neutralized spill to sewer if permitted or collect using an inert absorbent material and place in appropriate containers for disposal. Prevent spill from entering sewers and water courses. Report releases as required by local, provincial

7. HANDLING AND STORAGE

**Handling:** Prevent contact with the eyes, skin and clothing. Avoid breathing mists. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Do not mix with other drain cleaners. Dangerous chemical reactions, boiling or splattering may occur.

Do not reuse containers. Empty containers retain product residues can be hazardous. Follow all MSDS precautions when handling empty containers
Storage: Store in a cool, dry, well ventilated area away from incompatible materials

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines:**
- Sodium Hydroxide: 2 mg/m³ TLV-Ceiling
- Potassium Hydroxide: 2 mg/m³ TLV-Ceiling
- Water: None Established

**Engineering Controls:** Use with general or adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.

**Respiratory Protection:** In operations where the occupational exposure limits are exceeded, a NIOSH approved respirator with dust/mist cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with local authority and good industrial hygiene practice.

**Skin Protection:** Wear impervious gloves such as butyl rubber or neoprene

**Eye Protection:** Chemical safety goggles and face shield should be worn where splashing is possible.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance And Odor:** This product is a clear, colorless liquid, no odor.

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Boiling Point</th>
<th>Vapor Pressure</th>
<th>Solubility In Water</th>
<th>Evaporation Rate</th>
<th>pH</th>
<th>Octanol/Water Coefficient</th>
<th>Viscosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>104-110°C</td>
<td>Not applicable</td>
<td>100%</td>
<td>Not applicable</td>
<td>&gt;13</td>
<td>Not Determined</td>
<td>Not Determined</td>
</tr>
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</table>

### 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal storage and handling conditions.

**Incompatibility:** Acids, organic halogens, nitromethane and other nitro compounds, sugars, flammable liquids, most common metals and many other common materials.

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition Product:** Reacts with most common metals to form flammable hydrogen gas. Reacts with sugars to form carbon monoxide. Potassium oxide may be produced at very high temperatures.

### 11. TOXICOLOGICAL INFORMATION

**HEALTH HAZARDS:**

- **Ingestion:** Ingestion may cause erosion of the mucous membranes, esophagus and stomach with shock and possible perforation and peritonitis. May be fatal.
- **Inhalation:** Inhalation of mists may cause severe irritation of the nose throat and upper respiratory tract. Severe exposures may cause pulmonary edema and death.
- **Eye:** Corrosive. Liquid or mists may cause severe irritation or burns with redness, tearing and stinging of the eyes. May cause permanent eye damage.
- **Skin:** Liquid or mists may cause severe irritation and burns with scarring.
- **Sensitization:** None expected.
- **Chronic:** Prolonged exposure to dilute solutions may cause dermatitis.
- **Carcinogenicity:** None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.
- **Mutagenicity:** Sodium hydroxide has tested positive for Mutagenicity in some test systems.
Medical Conditions aggravated by: Employees with pre-existing eye, skin and respiratory disease may be at increased risk from exposure.

Acute Toxicity Value: Sodium Hydroxide: Lowest published lethal dose oral rabbit 500 mg/kg. Potassium Hydroxide: Oral Rat LD50 - 273 mg/kg

12. ECOLOGICAL INFORMATION

This material may be harmful to aquatic organisms at high concentration.

13. DISPOSAL CONSIDERATIONS

Before disposing be sure container is completely empty and rinsed with water to prevent accidental burns. Dispose in accordance with local, state and federal environmental regulations.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>DOT</th>
<th>TDG</th>
<th>MEX</th>
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<table>
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<thead>
<tr>
<th>Labels Required:</th>
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<tbody>
<tr>
<td></td>
<td>Corrosive</td>
<td>Corrosive</td>
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<table>
<thead>
<tr>
<th>Hazard Class / Packing Group:</th>
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</thead>
<tbody>
<tr>
<td>8, PG II</td>
<td>8, PG II</td>
<td>8, PG II</td>
<td></td>
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Note: Containers of 1 liter or less can be shipped as a Consumer Commodity (Limited Quantity) in packages with a gross mass of 30 kg or less in accordance with Section 1.17 of the TDG.

15. REGULATORY INFORMATION

Inventory Status.
TSCA: Complies
DSL: Complies
NDSL: No

U.S. Federal Regulations
SARA 313.
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.

SARA 311/312 Hazard Categories
Acute Health Hazard yes
Chronic Health Hazard yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No
U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

California Proposition 65
This product contains no chemicals requiring reporting under Proposition 65.

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

Canadian WHMIS: Classification: Class E (Corrosive)

Canadian CEPA: All the components of this product are listed on the Canadian DSL.

WHMIS: Class E (Corrosive)

16. OTHER INFORMATION

NFPA Rating: Health = 3 Fire = 0 Reactivity = 1
HMIS Rating: Health = 3 Fire = 0 Reactivity = 1

Disclaimer
The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.