1. Product and company identification

Product Name: East Bay Hi Temp Dish Machine Detergent
UN/ID No. UN1814 Potassium Hydroxide Solution

Supplier: Butler Chemicals, Inc.
3070 E. Ceena CT.
Anaheim, CA. 92806

Print date: May 23, 2014

Responsible name: K.B.
In case of emergency: HEALTH EMERGENCIES — SPILL EMERGENCIES CALL INFOTRAC 1(800) 535-5053

Product type: Mixture

2. Hazards identification

Appearance: Yellow Liquid  Physical State: Liquid  Odor: Slight bleach odor

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity – Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute Toxicity – Inhalation (Dust/Mists)</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Signal Word: Danger

Hazard Statement
Danger! Corrosive, Causes burns to the Respiratory Tract, Skin, Eyes and Gastrointestinal Tract. Causes permanent eye Damage. Effects of Contact or Inhalation may be delayed.

Potential Health Effects:
Inhalation: May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes
Skin contact: Causes skin burns
Eye contact: Causes serious eye damage
Ingestion: Causes burns
Chronic effects: None known

Physical Hazards
Mixing with water, acid or in compatible materials may cause splattering and release of heat. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated.

Precautionary Statements – Preventions
Do not get in Eyes, on Skin or on Clothing. Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only with adequate ventilation, use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection
Keep container closed.

**Precautionary Statements – Response**
Immediately call A POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so.
Continue rinsing immediately call a POISON CONTROL or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician, Rinse mouth, Do not induce vomiting!

**Precautionary Statements – Storage**
Store locked up
Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements –Disposal**
Disposed of contents/container to an approved waste disposal plant

**Other Hazards**
Ecological hazards: this material has exhibited moderate toxicity to aquatic organisms.

### 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Hydroxide</td>
<td>1310-58-3</td>
<td>20-21</td>
</tr>
<tr>
<td>Sodium Hypochlorite</td>
<td>7681-59-9</td>
<td>2-3</td>
</tr>
</tbody>
</table>

### 4. First aid measures

**Eye contact:**
Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed. Check for and remove any contact lenses if easy to do so. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids apart. Use cool running water. Do not use an eye ointment.

**Skin contact:**
Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure. Destroy contaminated shoes.

**Inhalation:**
Get medical aid immediately. Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and suitable mechanical device such as a bag and a mask

**Ingestion:**
Do NOT induce vomiting. If victim is conscious and alert, give 2-4 capfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Protection of first-aiders; Note to physician**
The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage. Probable mucosal damage may contraindicate the use of gastric lavage

### 5. Fire-fighting measures
6. Accidental release measures

**Personal precautions:** See section 8 for recommendations on the use of personal protective equipment.

**Environmental precautions:** Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

**Methods for cleaning up**
Diike contain liquid area using protective clothing, absorb with sand or other absorbent. Pick up and place in suitable, closed container for disposal. Dispose of all waste and cleanup materials in accordance with regulations.

**Personal precautions:**
See section 8 for recommendations on the use of personal protective equipment.

**Environmental precautions:** Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

7. Handling and storage

**Handling:**
Avoid breathing vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. When mixing, slowly add to water to minimize heat generation and splattering.

**Storage**
Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Do not store in aluminum container for use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances (see Section 10 of SDS).

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

**Engineering Controls**
Apply technical measures to comply with the occupational exposure limits.

**Local exhaust ventilation recommended. Eye wash stations. Showers.**

**Individual-protection measures, such as personal protective equipment**

<table>
<thead>
<tr>
<th><strong>Eye/Face Protection</strong></th>
<th>Wear chemical anti-splash safety glasses or goggles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skin and Body Protection</strong></td>
<td>Wear nitrile or rubber gloves, apron or lab coat, as appropriate, to prevent skin contact</td>
</tr>
<tr>
<td><strong>Respiratory Protection</strong></td>
<td>Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator</td>
</tr>
<tr>
<td><strong>General Hygiene considerations</strong></td>
<td>Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash face, hands and any exposed skin thoroughly after handling</td>
</tr>
</tbody>
</table>

9. Physical and chemical properties

<table>
<thead>
<tr>
<th><strong>Physical state</strong></th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Flash point</td>
<td>N/A</td>
</tr>
<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>pH</td>
<td>12.5</td>
</tr>
<tr>
<td>Boiling/condensation point</td>
<td>212°F</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>Complete</td>
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</tbody>
</table>

### 10. Stability reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable at normal temperatures and pressures</td>
</tr>
<tr>
<td>Hazardous polymerization</td>
<td>Will not occur</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Mixing wither water, acid, or incompatible materials my cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.</td>
</tr>
<tr>
<td>Incompatibilities/Materials to Avoid</td>
<td>Acids, Flammable liquids, Halogenated compounds, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>None known</td>
</tr>
</tbody>
</table>

### 11. Toxicological information

When in solution, this material will affect all tissues with which it comes in contact. The severity of the tissue damage is a function of concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. The material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes on contact.

CARCINOGENICITY: This product is not classified as a carcinogen by NTP, IARC, or OSHA

### 12. Ecological information

**ECOTOXICITY DATA:**
This material is alkaline and may raise the pH of surface waters with low buffering capacity. This material has exhibited moderate toxicity to aquatic organisms.

**FATE AND TRANSPORT:**
BIODEGRADATION: This material will disassociate into ionic form in the aquatic environment. Natural carbon dioxide will slowly neutralize this material.

BIOCONCENTRATION: This material will not bioconcentrate

ADDITIONAL ECOLOGICAL INFORMATION
This material has exhibited slight toxicity to terrestrial organisms.

### 13. Disposal considerations

Waste disposal:
The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a license waste contactor. Disposal of this product, solutions and any by products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contract with soil, waterways, drains and sewers.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.
14. Transport information

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Class</th>
<th>PG*</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>UN1814</td>
<td>Potassium Hydroxide Solution</td>
<td>8</td>
<td>II</td>
</tr>
</tbody>
</table>

*PG: Packing group

15. Regulatory information

International Inventories
Not determined

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>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Indicates information that has changed from previously issued version.

Disclaimer
The information provided in the Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and in not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet