1. **Product and company identification**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>TOTAL TREAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN/ID No.</td>
<td>UN1814 Potassium Hydroxide</td>
</tr>
</tbody>
</table>

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

**Print date:** May 17, 2015

**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:** Dark brown  
**Physical State:** Liquid  
**Odor:** Strong chemical odor

**Signal Word:** Danger

**Main Hazard:** May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes

**Hazard Statement:** Causes severe skin burns, tissue and eye damage, respiration tract and mucus membranes and deep tissue

**Precautionary Statements – Preventions**

- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Do not breath dust/fume/gas/mist/vapors/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary Statements – Response**

- Immediately call a poison center or doctor/physician.
- Eyes: Flush with large amounts of water. Consult a physician immediately.
- Skin: Wash with water. Remove contaminated clothing and foot wear seek medical attention.
- Inhalation: Get person out of contaminated area to fresh air. Seek medical attention.
- Ingestion: Do not induce vomiting. Give large quantities of water or milk. Consult physician immediately.

**Precautionary Statements – Storage**

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
**Precautionary Statements - Disposal**
Dispose 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>24%</td>
</tr>
</tbody>
</table>

### 4. First aid measures

**Eye contact:**
Immediately rinse with plenty of water for at least 15 minutes and seek medical attention immediately.

**Skin contact:**
Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.

**Inhalation:**
Move person to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

**Ingestion:**
**Do Not Induce Vomiting!** Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

**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. Treat symptomatically

### 5. Fire-fighting measures

**Fire Hazard:**
Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas which can form explosive mixtures in air.

**Extinguishing media:**
Use extinguishing agents appropriate for surrounding fire.

**Special protective equipment for fire-fighters:**
Wear self contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**Fire Fighting:**
Move container from fire area if it can be done without risk. Cool containers with water. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Avoid contact with skin.

**Flash point:**
Not flammable

### 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**
Dike contain liquid area using protective clothing, absorb with sand or other absorbent. Pick up and place in suitable, closed container for disposal. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Released should be reported, if required. To appropriate agencies. Dispose of all waste and cleanup materials in accordance with regulations.

### 7. Handling and storage
Handling: See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. 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 Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep away from incompatible materials (see section 10 for incompatibilities).

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 and washing facilities accessible to areas of use and handling.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear chemical anti-splash safety glasses or goggles with a face shield to protect against eye and skin contact when appropriate.

Skin and Body Protection Wear nitrile or rubber gloves, apron or lab coat, as appropriate, to prevent skin contact.

Respiratory Protection Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.

General Hygiene considerations 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.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>&gt;200 Deg. F.</td>
</tr>
<tr>
<td>Color</td>
<td>Dark brown liquid</td>
</tr>
<tr>
<td>pH</td>
<td>13.2</td>
</tr>
<tr>
<td>Vapor Pressure (mm GHz)</td>
<td>N/E</td>
</tr>
<tr>
<td>Specific Gravity (H2O=1)</td>
<td>0.9</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>71%</td>
</tr>
<tr>
<td>Evaporation Rate (N-Butyl Acetate) =1</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Complete</td>
</tr>
<tr>
<td>Reactivity in Water</td>
<td>None</td>
</tr>
<tr>
<td>VOC</td>
<td>8.97 grams per liter</td>
</tr>
</tbody>
</table>

10. Stability reactivity

Stability Stable at normal temperatures and pressures.

Hazardous polymerization Will not Occur

Conditions to avoid Mixing wither water, acid, or incompatible materials may 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.

Materials to avoid Acids, flammable liquids, halogenated compounds, prolonged contact with aluminum, brass, bornze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.

Hazardous decomposition products None known

11. Toxicological information

Acute toxicity:
Skin Not Available
Eyes Not Available
Respiratory Not Available
Ingestion LD50 Oral – rat 214 mg/kg

**Carcinogenicity:**
No components of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Signs & Symptoms of Exposure:**
- **Skin**
  - Irritation, Redness, Itchiness
- **Eyes**
  - Irritation, Redness, watering eyes, itchiness
- **Respiratory**
  - Irritation, coughing, wheezing
- **Ingestions**
  - Irritation, nausea, vomiting, diarrhea

**Chronic Toxicity:**
May cause damage to the following organs: upper respiratory tract, skin, eyes.

### 12. Ecological information

**Environmental effects:**
This material has exhibited moderate toxicity to aquatic 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

**Note:** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

<table>
<thead>
<tr>
<th>Regulatory</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</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</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
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<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>C</td>
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</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