1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Code 12810
Product Name Liquid Laundry Alkali II

Other means of identification

Recommended use of the chemical and restrictions on use
Use only for the purpose on the product label.

Details of the supplier of the safety data sheet

Manufacturer / Manufactured For
Team Systems
2723 Dove Country Drive
Stafford, TX 77477
Phone: 1 (800) 652-0717

Emergency telephone number
24 Hour Emergency Phone Number 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1</td>
<td>Sub-category A</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td>Acute aquatic toxicity</td>
<td>Category 3</td>
<td></td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
<td>Category 3</td>
<td></td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Danger

Hazard statements
Causes severe skin burns and eye damage
Harmful to aquatic life with long lasting effects

Appearance Clear, Colorless
Physical state Liquid
Odor Not Discernable

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Precautionary Statements - Response
Specific Treatment (See Section 4 on the SDS).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation persists, see a physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If irritation persists, see a physician.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. See a physician immediately.

Precautionary Statements - Storage
Keep container tightly closed in a cool, dry and well-ventilated place away from strong acids and oxidizing agents. Keep locked up and out of the reach of children.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Other Information
Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>10-30</td>
<td>*</td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>1310-58-3</td>
<td>1-5</td>
<td>*</td>
</tr>
<tr>
<td>Tetrasodium EDTA</td>
<td>64-02-8</td>
<td>1-5</td>
<td>*</td>
</tr>
<tr>
<td>Trisodium nitrilotriacetate</td>
<td>5064-31-3</td>
<td>.1-1</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If irritation persists or burns occur, get medical attention.

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice.

Inhalation
If mists/vapors are formed or irritation occurs, leave area and do not return until mists/vapors have dissipated. If irritation persists, see a physician.

Ingestion
Rinse mouth. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice.

Self-protection of the first aider
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms
Irritation or burning to mucous membranes. May cause irritation and/or burning to eyes and skin.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Explosion data
Sensitivity to Mechanical Impact: None.
Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions
Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Stop leak if safe to do so. Dilute residual material with dilute acetic acid (vinegar) to pH of less than 10.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

Incompatible materials
Strong acids and oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
**Potassium Hydroxide**

1310-58-3

**NIOSH IDLH** Immediately Dangerous to Life or Health

**Ceiling:** 2 mg/m$^3$

**Vacated Ceiling:** 2 mg/m$^3$

**Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

Showers, Eyewash stations & Ventilation systems.

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

- **Eye/face protection**
  - Tight sealing safety goggles.

- **Skin and body protection**
  - Wear chemical resistant gloves.

- **Respiratory protection**
  - If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene**

When using do not eat, drink or smoke. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse.

---

**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>Clear, Colorless</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Not Discernable</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>12.0 - 14.0</td>
<td>1% solution</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.256</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>212 °F / °C Degrees</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt; 1</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</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></td>
</tr>
<tr>
<td>Vapor density</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No Information available</td>
<td></td>
</tr>
</tbody>
</table>

**Other Information**

- **Density Lbs/Gal**
  - No Information available
- **VOC Content (%)**
  - No Information available

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available
Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
No special precautions beyond standard safe industrial practices.

Incompatible materials
Strong acids and oxidizing agents.

Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating and toxic gases and vapors. Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
No data available

Inhalation
Causes burns.

Eye contact
Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact
The product causes burns of eyes, skin and mucous membranes.

Ingestion
Causes burns.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Hydroxide 1310-58-3</td>
<td>= 284 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trisodium nitrilotriacetate 5064-31-3</td>
<td>= 920 mg/kg (Rat)</td>
<td>-</td>
<td>&gt; 5 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
No Information available.

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

Corrosivity
Causes burns. Extremely corrosive and destructive to tissue. Risk of serious damage to eyes.

Sensitization
No Information available.

Germ cell mutagenicity
No Information available.

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trisodium nitrilotriacetate 5064-31-3</td>
<td>-</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity
No Information available.

STOT - single exposure
No Information available.

STOT - repeated exposure
Chronic toxicity
Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.

Target organ effects
EYES, Respiratory system, Skin.

Aspiration hazard
No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

0.05% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Hydroxide</td>
<td>-</td>
<td>80: 96 h Gambusia affinis mg/L LC50 static</td>
<td>-</td>
</tr>
<tr>
<td>Tetrasodium EDTA</td>
<td>1.01: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static</td>
<td>610: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>-</td>
<td>5560 - 6080: 96 h Lepomis macrochirus mg/L LC50 flow-through 12946: 96 h Lepomis macrochirus mg/L LC50 static 6020 - 7070: 96 h Pimephales promelas mg/L LC50 static 7050: 96 h Pimephales promelas mg/L LC50 semi-static 5420 - 6700: 96 h Pimephales promelas mg/L LC50 static 4747 - 7824: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>1000: 48 h Daphnia magna mg/L EC50 340.7 - 469.2: 48 h Daphnia magna mg/L EC50 Static</td>
</tr>
<tr>
<td>Trisodium nitrilotriacetate</td>
<td>560 - 1000: 96 h Chlorella vulgaris mg/L EC50</td>
<td>93 - 170: 96 h Pimephales promelas mg/L LC50 flow-through 560 - 1000: 96 h Oryzias latipes mg/L LC50 semi-static 72 - 133: 96 h Oncorhynchus mykiss mg/L LC50 static 560 - 1000: 96 h Poecilia reticulata mg/L LC50 semi-static 560 - 1000: 96 h Poecilia reticulata mg/L LC50 114: 96 h Pimephales promelas mg/L LC50 175 - 225: 96 h Lepomis macrochirus mg/L LC50 static 252: 96 h Lepomis macrochirus mg/L LC50 470: 96 h Pimephales promelas mg/L LC50 static 560 - 1000: 96 h Oryzias latipes mg/L LC50</td>
<td>560 - 1000: 48 h Daphnia magna mg/L LC50</td>
</tr>
</tbody>
</table>

### Persistence and degradability

No Information available.

### Bioaccumulation

No Information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Hydroxide</td>
<td>0.83</td>
</tr>
</tbody>
</table>

### Other adverse effects

No Information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Contaminated packaging

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
</table>
### 14. TRANSPORT INFORMATION

The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under 49 CFR, IATA and IMDG to assure regulatory compliance.

#### DOT

**DOT Proper Shipping name**

UN1760, Corrosive liquid, n.o.s. (contains sodium hydroxide and potassium hydroxide), 8, PG II

### 15. REGULATORY INFORMATION

#### International Inventories

- **TSCA**
  - Complies
- **DSL/NDSL**
  - Complies
- **EINECS/ELINCS**
  - Does not comply
- **ENCS**
  - Does not comply
- **IECSC**
  - Complies
- **KECL**
  - Does not comply
- **PICCS**
  - Complies
- **AICS**
  - Does not comply

**Legend:**

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory.
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List.
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

#### US 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

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### Chemical Name

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide 1310-73-2</td>
<td>1000 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Potassium Hydroxide 1310-58-3</td>
<td>1000 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.
<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>Sodium Hydroxide</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td>1310-58-3</td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

**US State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1310-58-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trisodium nitrilotriacetate</td>
<td>-</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5064-31-3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**U.S. EPA Label Information**

EPA Pesticide Registration Number  Not Applicable

**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>3</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

**Legend**

N/A - Not Applicable
N/E - Not Established
N/D - Not Determined
N/K - Not Known

**Issue Date** 03-Apr-2001
**Revision Date** 02-Jan-2015
**Revision Note** New format

**Disclaimer**
The information provided in this 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 a guidance for safe handling, use, processing, storage, transportation, disposal and release and is 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