SAFETY DATA SHEET
Liquid Detergent

Section 1. Identification

GHS product identifier: Liquid Detergent
Other means of identification: 6139FS
Product type: Liquid

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Supplier's details: Essential Industries, Inc.
P.O. Box 12
Merton, WI  53056-0012
Phone: 262-538-1122

Emergency telephone number (with hours of operation): 800-843-6174 (24 Hours)

Section 2. Hazards identification

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture: FLAMMABLE LIQUIDS - Category 3
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2

GHS label elements
Hazard pictograms:

Signal word: Warning

Hazard statements: Flammable liquid and vapor.
Causes serious eye irritation.
Suspected of causing cancer.

Precautionary statements
General: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Wash hands thoroughly after handling.

Response: IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

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Date of previous issue: 10/10/2014.
Version: 0.02

Powered by IHS
Section 2. Hazards identification

Storage: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified: None known.

Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>Not available</td>
</tr>
</tbody>
</table>

CAS number/other identifiers

<table>
<thead>
<tr>
<th>CAS number</th>
<th>Product code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>6139FS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chloride</td>
<td>5 - 10</td>
<td>7647-14-5</td>
</tr>
<tr>
<td>Betaines, coco alkyldimethyl</td>
<td>5 - 10</td>
<td>68424-94-2</td>
</tr>
<tr>
<td>Coconut oil diethanolamide</td>
<td>1 - 5</td>
<td>68603-42-9</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>1 - 5</td>
<td>64-17-5</td>
</tr>
<tr>
<td>Alcohols, C12-15, ethoxylated</td>
<td>1 - 5</td>
<td>68131-39-5</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>0 - 1</td>
<td>111-42-2</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol</td>
<td>ACGIH TLV (United States, 6/2013). STEL: 1000 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 3 ppm 8 hours. TWA: 15 mg/m³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 3 ppm 10 hours. TWA: 15 mg/m³ 10 hours. ACGIH TLV (United States, 6/2013). Absorbed through skin. TWA: 1 mg/m³ 8 hours. Form: Inhalable fraction and vapor.</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Section 8. Exposure controls/personal protection

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state: Liquid
Color: Blue
Odor: Floral
Odor threshold: Not available
pH: 5.5 to 6.5
Melting point: 0°C (32°F)
Boiling point: 100°C (212°F)
Flash point: Closed cup: 51.67°C (125°F) [No sustained combustion under required test conditions listed in DOT 173.120(3).]

Evaporation rate: Not available
Flammability (solid, gas): Not available
Lower and upper explosive (flammable) limits: Not available
Vapor pressure: <4 kPa (<30 mm Hg) [room temperature]
Vapor density: <1 [Air = 1]
Specific gravity: 1.06 g/cm³
Solubility: Not available

Partition coefficient: n-octanol/water: Not available
Auto-ignition temperature: Not available
Viscosity: Not available
VOC content: 4.6%

VOCs are calculated following the requirements under 40 CFR, Part 59, Subpart C for Consumer Products and Subpart D for Architectural Coatings.
Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium chloride</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Betaines, coco alkyl(dimethyl</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Coconut oil diethanolamide</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>12200 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>124700 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td>Alcohols, C12-15, ethoxylated diethanolamine</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>7 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2 g/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium chloride</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>10 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Coconut oil diethanolamide</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 microliters</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>300 microliters</td>
<td>-</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.066666667 minutes 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 microliters</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 microliters</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>400 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 20</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Diethanolamine</th>
<th>Eyes - Severe irritant</th>
<th>Rabbit</th>
<th>-</th>
<th>milligrams</th>
<th>24 hours 750 Micrograms</th>
<th>5500 milligrams</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>milligrams</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td></td>
<td>50 milligrams</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sensitization**
Not available.

**Mutagenicity**
Not available.

**Carcinogenicity**
Not available.

**Classification**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coconut oil diethanolamide</td>
<td>-</td>
<td>2B</td>
<td>-</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>-</td>
<td>2B</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**
Not available.

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

**Information on the likely routes of exposure**
Not available

**Potential acute health effects**

- **Eye contact**: Causes serious eye irritation.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: No known significant effects or critical hazards.
- **Ingestion**: Irritating to mouth, throat and stomach.

**Symptoms related to the physical, chemical and toxicological characteristics**

- **Eye contact**: Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness

- **Inhalation**: No specific data.
- **Skin contact**: No specific data.
Section 11. Toxicological information

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
- Potential immediate effects: Not available
- Potential delayed effects: Not available

Long term exposure
- Potential immediate effects: Not available
- Potential delayed effects: Not available

Potential chronic health effects
Not available.

General: No known significant effects or critical hazards.

Carcinogenicity: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>11499.6 mg/kg</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium chloride</td>
<td>Acute EC50 2430000 µg/l Fresh water</td>
<td>Algae - Navicula seminulum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 28.85 mg/dm3 Fresh water</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 519.6 mg/l Fresh water</td>
<td>Crustaceans - Cypris subglobosa</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 402600 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute IC50 6.87 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1000000 µg/l Fresh water</td>
<td>Fish - Morone saxatilis - Larvae</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 6 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.314 g/L Fresh water</td>
<td>Daphnia - Daphnia pulex</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 100 mg/l Fresh water</td>
<td>Fish - Gambusia holbrooki - Adult</td>
<td>8 weeks</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 17.921 mg/l Marine water</td>
<td>Algae - Ulva pertusa</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 25500 µg/l Marine water</td>
<td>Crustaceans - Artemia franciscana - Larvae</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 42000 µg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>4 days</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>Acute LC50 42000 µg/l Marine water</td>
<td>Algae - Ulva pertusa</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 4.995 mg/l Marine water</td>
<td>Fish - Gambusia holbrooki - Larvae</td>
<td>12 weeks</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.375 ul/L Fresh water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Liquid Detergent**

### Section 12. Ecological information

| Product/ingredient name | Acute EC50 0.7 mg/l Fresh water | Acute EC50 0.39 mg/l Fresh water | Acute EC50 302 µg/l Fresh water | Acute LC50 1400 µg/l Fresh water | Chronic NOEC 83 µg/l Fresh water | Acute EC50 0.7 mg/l Fresh water | Acute EC50 12 mg/l Fresh water | Acute LC50 28800 µg/l Fresh water | Acute LC50 2150 µg/l Fresh water | Acute LC50 100 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata | Crustaceans - Ceriodaphnia dubia - Neonate | Fish - Pimephales promelas | Algae - Pseudokirchneriella subcapitata | Daphnia - Daphnia magna - Neonate | Daphnia - Daphnia pulex | Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours | 48 hours | 48 hours | 96 hours | 21 days | 96 hours | 48 hours | 48 hours | 96 hours |

**Persistence and degradability**

Not available.

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol</td>
<td>2.03 to 6.24</td>
<td>237</td>
<td>low</td>
</tr>
<tr>
<td>Alcohols, C12-15, ethoxylated</td>
<td>-1.43</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>2.03 to 6.24</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>-0.35</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

**Mobility in soil**

| Soil/water partition coefficient (K_{oc}) | Not available |

**Other adverse effects**

No known significant effects or critical hazards.

### Section 13. Disposal considerations

**Disposal methods**

The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Section 14. Transport information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Additional information</td>
<td>No sustained combustion under required test conditions listed in DOT 173.120(3).</td>
<td>No sustained combustion under required test conditions listed in IMDG Chapter 2.3.1.3.</td>
</tr>
</tbody>
</table>

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulations: United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

SARA 311/312 Classification: Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium chloride</td>
<td>5 - 10</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>Betaines, coco alkyl dimethyl</td>
<td>5 - 10</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>Coconut oil diethanolamide</td>
<td>1 - 5</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>1 - 5</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>0 - 1</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

State regulations

Date of issue/Date of revision: 12/19/2014. Date of previous issue: 10/10/2014. Version: 0.02 11/13
Section 15. Regulatory information

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coconut oil diethanolamide</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

International regulations

Canada inventory : All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

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Date of issue/Date of revision : 12/19/2014.
Date of previous issue : 10/10/2014.
Section 16. Other information

Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
UN = United Nations

References
Not available

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.