SECTION 1: Product and company identification

Product name: Hand Sanitizer
Use of the substance/mixture: Premoistened wipe
Product code: 1448
Company: Four Star Chemical
   3137 East 26th Street
   Vernon, CA 90058 - USA
   T (323) 266-7111
Emergency number: 24-Hour Emergency Number: (800) 255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
- Flam. Sol. 2 H228
- Eye Irrit. 2A H319
- STOT SE 3 H336

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling
- Hazard pictograms (GHS-US):
  - GHS02
  - GHS07
- Signal word (GHS-US): Warning
- Hazard statements (GHS-US):
  - Flammable solid
  - Causes serious eye irritation
  - May cause drowsiness or dizziness
- Precautionary statements (GHS-US):
  - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
  - Use explosion-proof electrical/ventilating/lighting/equipment
  - Avoid breathing dust/fume/gas/mist/vapors/spray
  - Wash thoroughly after handling
  - Use only outdoors or in a well-ventilated area
  - Wear protective gloves/protective clothing/eye protection/face protection
  - If inhaled: Remove person to fresh air and keep comfortable for breathing
  - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
  - Call a poison center/doctor if you feel unwell
  - If eye irritation persists: Get medical advice/attention
  - In case of fire: Use water to extinguish
  - Store in a well-ventilated place. Keep container tightly closed
  - Store locked up
  - Dispose of contents/container to comply with local/regional/national/international regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Date of issue: 6/17/2015  Revision date: 05/07/2015  Version: 1.1  P GHS SDS  Page 1 of 6
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower.
First-aid measures after skin contact: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion: Rinse mouth with water. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: None under normal use.
Symptoms/injuries after skin contact: Contact during a long period may cause light irritation.
Symptoms/injuries after eye contact: Causes serious eye irritation.
Symptoms/injuries after ingestion: Gastrointestinal complaints.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: All extinguishing media allowed.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapor.
Reactivity: Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment: Contain released substance, pump into suitable containers.
Methods for cleaning up: This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available.
SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed.
Hygiene measures: Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Comply with applicable regulations.
Storage conditions: Keep container closed when not in use.
Incompatible products: Oxidizing agent.
Prohibitions on mixed storage: KEEP SUBSTANCE AWAY FROM: oxidizing agents.
Storage area: Meet the legal requirements. Store in a cool area. Store in a well-ventilated place.
Special rules on packaging: meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls
Personal protective equipment: Use appropriate personal protective equipment when risk assessment indicates this is necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: Solid
Appearance: Premoistened wipe.
Odor: Pleasant scent
Odor threshold: No data available
pH: No data available
Melting point: No data available
Freezing point: No data available
Boiling point: > 95 °F
Flash point: 70 °F Closed Cup - Tested using the liquid component of the towelette
Relative evaporation rate (butyl acetate=1): No data available
Flammability (solid, gas): No data available
Explosion limits: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Vapor pressure: No data available
Relative density: No data available
Relative vapor density at 20 °C: No data available
Specific gravity / density: 0.88 g/ml
Solubility: Liquid component is soluble in water.
Log Pow: No data available
Log Kow: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
VOC content: < 75 % - Tested using the liquid component of the towelette
## Section 10: Reactivity

10.1. Reactivity

Upon combustion: CO and CO2 are formed.

### Section 10.2. Chemical stability

No additional information available

### Section 10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

### Section 10.4. Conditions to avoid

No additional information available

### Section 10.5. Incompatible materials

No additional information available

### Section 10.6. Hazardous decomposition products

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

## Section 11: Toxicological information

### Section 11.1. Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDECETH-5 (34398-01-1)</td>
<td>Not classified</td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 1400 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol (64-17-5)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>10740 mg/kg body weight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 16000 mg/kg (Rabbit; Literature study)</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
<td>10740.000 mg/kg body weight</td>
</tr>
</tbody>
</table>

#### Skin corrosion/irritation

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skim corrosion/irritation</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

#### Serious eye damage/irritation

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

#### Respiratory or skin sensitization

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

#### Germ cell mutagenicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

#### Carcinogenicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

#### Reproductive toxicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

#### Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>May cause drowsiness or dizziness.</td>
</tr>
</tbody>
</table>

#### Specific target organ toxicity (repeated exposure)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

#### Aspiration hazard

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

#### Symptoms/injuries after ingestion

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms/injuries after ingestion</td>
<td>Gastrointestinal complaints.</td>
</tr>
</tbody>
</table>

### Symptoms/injuries after skin contact

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms/injuries after skin contact</td>
<td>Contact during a long period may cause light irritation.</td>
</tr>
</tbody>
</table>

### Symptoms/injuries after eye contact

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms/injuries after eye contact</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

### Specific target organ toxicity after inhalation

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific target organ toxicity after inhalation</td>
<td>None under normal use.</td>
</tr>
</tbody>
</table>

## Section 12: Ecological information

### Section 12.1. Toxicity

#### UNDECETH-5 (34398-01-1)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>&lt; 10 mg/l</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>&lt; 10 mg/l</td>
</tr>
<tr>
<td>ErC50 (algae)</td>
<td>&lt; 10 mg/l</td>
</tr>
</tbody>
</table>

#### Ethanol (64-17-5)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>14200 mg/l (96 h; Pimephales promelas)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>9300 mg/l (48 h; Daphnia magna)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>13000 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>10800 mg/l (24 h; Daphnia magna)</td>
</tr>
<tr>
<td>Threshold limit other aquatic organisms 1</td>
<td>65 mg/l (72 h; Protozoa)</td>
</tr>
<tr>
<td>Threshold limit algae 1</td>
<td>1450 mg/l (192 h; Microcystis aeruginosa; Growth rate)</td>
</tr>
<tr>
<td>Threshold limit algae 2</td>
<td>5000 mg/l (168 h; Scenedesmus quadricauda; Growth rate)</td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and degradability</th>
<th>Biochemical oxygen demand (BOD)</th>
<th>Chemical oxygen demand (COD)</th>
<th>ThOD</th>
<th>BOD (% of ThOD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol (64-17-5)</td>
<td>Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.</td>
<td>0.8 - 0.967 g O₂ /g substance</td>
<td>1.70 g O₂ /g substance</td>
<td>2.10 g O₂ /g substance</td>
<td>0.43 % ThOD</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>BCF fish 1</th>
<th>Log Pow</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol (64-17-5)</td>
<td>1 (72 h; Cyprinus carpio)</td>
<td>-0.31</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
</tbody>
</table>

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods: Do not flush wipes. Dispose of contents/container to comply with local/regional/national/international regulations.

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

UN-No.(DOT): UN3175

Proper Shipping Name (DOT): Solids containing flammable liquid, n.o.s.


Hazard labels (DOT): 4.1 - Flammable solid

Packing group (DOT): II - Medium Danger

DOT Packaging Non Bulk (49 CFR 173.xxx): 212

DOT Packaging Bulk (49 CFR 173.xxx): 240

DOT Symbols: G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102): 47,IB6,IP2,T3,TP33

DOT Packaging Exceptions (49 CFR 173.xxx): 151

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 15 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 50 kg

DOT Vessel Stowage Location: B

Additional information

Other information: This product may be eligible to be shipped as a Consumer Commodity ORM-D utilizing the exception found at 49 CFR 173.151.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available
SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

<table>
<thead>
<tr>
<th>SARA Section 311/312 Hazard Classes</th>
<th>Immediate (acute) health hazard</th>
</tr>
</thead>
</table>

California Proposition 65 - This product does not contain substances known to the state of California to cause cancer and/or reproductive toxicity

SECTION 16: Other information

Training advice: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids Category 2</td>
</tr>
<tr>
<td>Flam. Sol. 2</td>
<td>Flammable solids Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) Category 3</td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapor</td>
</tr>
<tr>
<td>H228</td>
<td>Flammable solid</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
</tbody>
</table>

NFPA health hazard: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard: 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.