**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

<table>
<thead>
<tr>
<th>1.1. Product identifier</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Product form</td>
<td>Mixture</td>
</tr>
<tr>
<td>Product name</td>
<td>Lemon Air- 4016, 4012, 4014</td>
</tr>
<tr>
<td>Product code</td>
<td>80346</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.2. Relevant identified uses of the substance or mixture and uses advised against</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantage Chemical, LLC</td>
<td></td>
</tr>
<tr>
<td>Temecula, CA, 92590</td>
<td></td>
</tr>
<tr>
<td>T 1-855-238-2436</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.4. Emergency telephone number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency number</td>
<td>1-800-424-9300</td>
</tr>
<tr>
<td>ChemTrec</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 2: Hazards identification**

<table>
<thead>
<tr>
<th>2.1. Classification of the substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS-US classification</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td>Eye Irrit. 2B</td>
</tr>
<tr>
<td>H315</td>
</tr>
<tr>
<td>H320</td>
</tr>
<tr>
<td>Full text of H-statements: see section 16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.2. Label elements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS-US labelling</td>
<td></td>
</tr>
<tr>
<td>Hazard pictograms (GHS-US)</td>
<td>![GHS07]</td>
</tr>
<tr>
<td>Signal word (GHS-US)</td>
<td>Warning</td>
</tr>
</tbody>
</table>
|Hazard statements (GHS-US) | H315 - Causes skin irritation  
|                        | H320 - Causes eye irritation |
|Precautionary statements (GHS-US) | P264 - Wash hands, forearms and face thoroughly after handling  
|                                   | P280 - Wear protective gloves/protective clothing/eye protection/face protection  
|                                   | P302+P352 - If on skin: Wash with plenty of water  
|                                   | P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
|                                   | P332+P313 - If skin irritation occurs: Get medical advice/attention  
|                                   | P337+P313 - If eye irritation persists: Get medical advice/attention  
|                                   | P362 - Take off contaminated clothing and wash before reuse |

<table>
<thead>
<tr>
<th>2.3. Other hazards</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.4. Unknown acute toxicity (GHS-US)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 3: Composition/information on ingredients**

<table>
<thead>
<tr>
<th>3.1. Substance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.2. Mixture</th>
<th></th>
</tr>
</thead>
</table>
### Name
Mixed Quaternary Ammonium Chlorides

### Product identifier
1 - 10

### GHS-US classification
Flam. Liq. 3, H226
Met. Corr. 1, H290
Acute Tox. 2 (Oral), H300

Full text of H-statements: see section 16

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

- **First-aid measures general**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- **First-aid measures after inhalation**: Allow breathing of fresh air. Allow the victim to rest.
- **First-aid measures after skin contact**: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- **First-aid measures after eye contact**: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **First-aid measures after ingestion**: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

**Symptoms/injuries after eye contact**: Causes eye irritation.

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

No additional information available

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

- **Unsuitable extinguishing media**: Do not use a heavy water stream.

**5.2. Special hazards arising from the substance or mixture**

No additional information available

**5.3. Advice for firefighters**

- **Firefighting instructions**: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- **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**

**6.1.1. For non-emergency personnel**

**Emergancy procedures**: Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

- **Protective equipment**: Equip cleanup crew with proper protection.
- **Emergency procedures**: Ventilate area.

**6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

- **Methods for cleaning up**: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

**6.4. Reference to other sections**

See Heading 8. Exposure controls and personal protection.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Precautions for safe handling**: Avoid contact with skin, eyes and clothing.

**7.2. Conditions for safe storage, including any incompatibilities**

- **Storage conditions**: Keep only in original container in a cool well ventilated area. Keep container closed when not in use.
- **Incompatible products**: Strong bases. Strong acids.
Incompatible materials: Sources of ignition. Direct sunlight.
Storage temperature: 25 (5 - 42) °C

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Lemon Air-4016, 4012, 4014</th>
<th>ACGIH</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OSHA</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mixed Quaternary Ammonium Chlorides</th>
<th>ACGIH</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OSHA</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

- Personal protective equipment: Avoid all unnecessary exposure.
- Hand protection: Wear protective gloves.
- Eye protection: Chemical goggles or safety glasses.
- Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state: Liquid
- Colour: red
- Odour: Citrus
- Odour threshold: No data available
- pH: 7 (6 - 8)
- Melting point: No data available
- Freezing point: <= 0 °C
- Boiling point: >= 100 °C
- Flash point: None
- Relative evaporation rate (butylacetate=1): No data available
- Flammability (solid, gas): No data available
- Explosive limits: No data available
- Explosive properties: No data available
- Oxidising properties: No data available
- Vapour pressure: No data available
- Relative density: No data available
- Relative vapour density at 20 °C: No data available
- Density: >= 1.02 g/ml
- Solubility: Soluble in water.
  - Water: Solubility in water of component(s) of the mixture:
    - 1,2-propanediol: Complete
    - nonylphenoxy(polyethyleneoxy)ethanol (9EO): Complete
- 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
9.2. Other information
VOC content : <= 51 g/l

SECTION 10: Stability and reactivity
10.1. Reactivity
No additional information available

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity : Not classified

Mixed Quaternary Ammonium Chlorides

**| LD50 oral rat | 50 mg/kg |
---|---|---|
**| ATE US (oral) | 50,000 mg/kg bodyweight |

Skin corrosion/irritation : Causes skin irritation.

pH: 7 (6 - 8)

Serious eye damage/irritation : Causes eye irritation.

pH: 7 (6 - 8)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after eye contact : Causes eye irritation.

SECTION 12: Ecological information
12.1. Toxicity
No additional information available

12.2. Persistence and degradability

**| Lemon Air- 4016, 4012, 4014 |
---|---|
Persistence and degradability : Not established.

12.3. Bioaccumulative potential

**| Lemon Air- 4016, 4012, 4014 |
---|---|
Bioaccumulative potential : Not established.
**Lemon Air- 4016, 4012, 4014**  
Safety Data Sheet  
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 12.4. Mobility in soil
No additional information available

### 12.5. Other adverse effects
Effect on the global warming : No known ecological damage caused by this product.
Other information : Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods
- Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
- Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

- **Department of Transportation (DOT)**
  - In accordance with DOT
  - Not regulated for transport

**Additional information**
Other information : No supplementary information available.

- **ADR**
  - No additional information available

- **Transport by sea**
  - No additional information available

- **Air transport**
  - No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations
- **Mixed Quaternary Ammonium Chlorides**  
  Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations
- **CANADA**
  - No additional information available

- **EU-Regulations**
  - No additional information available

- **Classification according to Regulation (EC) No. 1272/2008 [CLP]**
  - No additional information available

- **Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**
  - Not classified

- **National regulations**
  - No additional information available

#### 15.3. US State regulations
No additional information available

### SECTION 16: Other information

- **Revision date** : 10/15/2015
- **Other information** : None.
Full text of H-statements:

<table>
<thead>
<tr>
<th>H-Statement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2</td>
<td>Acute toxicity (oral), Category 2</td>
</tr>
<tr>
<td>Eye Irrit. 2B</td>
<td>Serious eye damage/eye irritation, Category 2B</td>
</tr>
<tr>
<td>Flam. Liq. 3</td>
<td>Flammable liquids, Category 3</td>
</tr>
<tr>
<td>Met. Corr. 1</td>
<td>Corrosive to metals, Category 1</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>H226</td>
<td>Flammable liquid and vapour</td>
</tr>
<tr>
<td>H290</td>
<td>May be corrosive to metals</td>
</tr>
<tr>
<td>H300</td>
<td>Fatal if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
</tbody>
</table>

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard  : 0 - Materials that will not burn.

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

NFPA specific hazard : None

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard  : 0 - Materials that will not burn.

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

NFPA specific hazard : None

HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal Protection : B

B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

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.