1. IDENTIFICATION

Product Identifier
Product Name Hi-Q Disinfectant #17

Other Means of Identification
Product Code 651700

Recommended Use of the Chemical and Restrictions on Use
Recommended Use Disinfectant concentrate. For industrial use.

Details of the Supplier of the Safety Data Sheet
Midlab, Inc.
140 Private Brand Way
Athens, TN 37303

Emergency Telephone Number
Company Phone Number Phone: 1-423-337-3180
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Blue Physical State Liquid Odor Floral

Classification
Acute toxicity: oral Category 4
Acute Toxicity: dermal Category 5
Skin Corrosion/Irritation Category 1
Serious Eye Damage/Eye Irritation Category 1
Reproductive Toxicity Category 1 Sub-category A
Aquatic Toxicity: Acute Category 2

Signal Word
Danger

Hazard Statements
Harmful if swallowed.
Causes severe skin burns and eye damage.
Causes serious eye damage.
May damage fertility or the unborn child if ingested.
Toxic to aquatic life.

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe spray.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear glasses or goggles as needed to prevent exposure to eyes.
Use personal protective equipment as required.
Avoid release to the environment.
Precautionary Statements - Response
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 advice/attention.
IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
SPECIFIC TREATMENT: Remove from exposure and treat symptoms.

Precautionary Statements - Storage
Store locked up.

Precautionary Statements - Disposal
Dispose of contents/container in accordance with local, regional, and/or national regulations.

Other Hazards
None known.

Unknown Acute Toxicity
None known.

Product AT USE DILUTION
GHS Classification: Not classified.
Signal Word: No signal word.
Hazard Statements: No known significant effects or critical hazards.
Prevention: Wash thoroughly after handling.
Response: Get medical attention if symptoms appear.
Disposal: No other specific measures identified.
Other Hazards: None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>60-100</td>
</tr>
<tr>
<td>Alkyl Dimethyl Benzyl Ammonium Chloride</td>
<td>68424-85-1</td>
<td>7-9</td>
</tr>
<tr>
<td>Octyl Decyl Dimethyl Ammonium Chloride</td>
<td>32426-11-2</td>
<td>6-8</td>
</tr>
<tr>
<td>Dioctyl Dimethyl Ammonium Chloride</td>
<td>5538-94-3</td>
<td>3-5</td>
</tr>
<tr>
<td>Didecyl Dimethyl Ammonium Chloride</td>
<td>7173-51-5</td>
<td>3-5</td>
</tr>
<tr>
<td>Tetrasodium EDTA</td>
<td>64-02-8</td>
<td>7-13</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>2-4</td>
</tr>
<tr>
<td>Nonylphenoxypolyethoxyethanol</td>
<td>68412-54-4</td>
<td>1-5</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>77-92-9</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

### 4. FIRST-AID MEASURES

**First Aid Measures**

**Eye Contact**
Causes burns and may result in permanent injury to eyes including blindness. Immediately flush eyes with water for 15-20 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention at once.

**Skin Contact**
Causes corrosive burns. Brief exposure may cause irritation and defatting of the skin. Exposures not promptly washed off may lead to toxic effects similar to ingestion. Harmful if absorbed through skin. Take off contaminated clothing. Rinse skin immediately with plenty...
of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

**Inhalation**
Mists and vapors can irritate the throat and respiratory tract. High vapor concentrations may cause central nervous system effects. Symptoms may include headaches, dizziness, and drowsiness. Harmful if inhaled. If symptoms are experienced, move victim to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison center or doctor for further treatment advice.

**Ingestion**
Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea and possibly death. Harmful if swallowed. Call a poison control center or doctor immediately for further treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Most Important Symptoms and Effects**

**Symptoms**
Causes burns to the eyes and skin.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Notes to Physician**
Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

**Product AT USE DILUTION**

Eye Contact: May cause eye irritation. Rinse with water for a few minutes.
Skin Contact: May cause skin irritation. Rinse with water for a few minutes.
Inhalation: No special measures required. Treat symptomatically.
Ingestion: Get medical attention if symptoms occur.

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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

**Unsuitable Extinguishing Media**
Not determined.

**Specific Hazards Arising from the Chemical**
Irritating and toxic gases or fumes may be released during a fire.

**Hazardous Combustion Products**
Carbon monoxide and carbon dioxide, and toxic chloride vapors.

**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.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions**
Wear protective clothing as described in Section 8 of this safety data sheet.

**Environmental Precautions**
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13, Disposal Considerations, for additional information. See Section 12 for additional Ecological Information.

**Methods and Material for Containment and Cleaning Up**

**Methods for Containment**
Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

**Methods for Clean-Up**
Contain and collect with an inert absorbent and place into an appropriate container for disposal. Rinse area with clean water and dry before permitting traffic.
7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. For industrial and commercial use only. Avoid contact with skin, eyes or clothing.

Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions
Keep container tightly closed and store in a cool, dry and well-ventilated place. Protect from freezing. Keep out of the reach of children.

Incompatible Materials
None known based on information supplied.

Product AT USE DILUTION

Handling and Storage: Wash thoroughly after handling. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 64-17-5</td>
<td>1000ppm</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas. Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. Eyewash stations. Showers.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection
Eye protection should be used when splashing may occur.

Skin and Body Protection
Wear protective gloves when handling this product.

Respiratory Protection
Under normal conditions, respirator is not normally required. Avoid breathing vapors.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.
Product AT USE DILUTION

Engineering Controls: Good general room ventilation should be adequate.
Eye Protection: Wear glasses or goggles when exposure may occur.
Skin and Body Protection: Wear protective gloves when handling this product.
Respiratory Protection: No protective equipment is needed under normal use conditions.
General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice.

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</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Floral</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (concentrate)</td>
<td>6.0-6.5</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Approximately 32°F</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Approximately 212°F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;210°F (&gt;99°C)</td>
<td>Pensky Martin Closed Cup</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
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<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely soluble</td>
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</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
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<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
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<tr>
<td>Explosive Properties</td>
<td>Not an explosive</td>
<td></td>
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<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

Product AT USE DILUTION

Physical State: Liquid
Color: Light blue to colorless
Odor: Floral
pH: 6.5-7.0

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to Avoid
Keep out of reach of children. Keep from freezing. Keep away from heat and strong oxidizing agents.

Incompatible Materials
Strong oxidizing agents (may result in fire), reducing agents.

**Hazardous Decomposition Products**
Thermal decomposition may produce carbon monoxide, carbon monoxide, and toxic chloride vapors.

### 11. TOXICOLOGICAL INFORMATION

#### Information on Likely Routes of Exposure

**Product Information**

**Eye Contact**
Avoid contact with eyes.

**Skin Contact**
Avoid contact with skin.

**Inhalation**
Avoid breathing vapors or mists.

**Ingestion**
Do not taste or swallow.

**Chronic Effects**
Ingestion of ethanol by pregnant women can cause reproductive toxicity to the fetus.

#### Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary Ammonium Chlorides Blend</td>
<td>405mg/kg</td>
<td>740mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Tetrasodium EDTA 64-02-8</td>
<td>1780mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nonylphenoxypolyethoxethanol 68412-54-4</td>
<td>3310ml/kg (Rat)</td>
<td>&gt;2000mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Citric Acid 77-92-9</td>
<td>11700mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Information on Physical, Chemical and Toxicological Effects**

**Symptoms**
Please see section 4 of this SDS for symptoms.

**Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure**

**Carcinogenicity**
This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical Measures of Toxicity**
Not determined

**Product AT USE DILUTION**
No specific data available.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary Ammonium Chlorides Blend</td>
<td>-</td>
<td>320µg/L (96hr)</td>
<td>-</td>
<td>94µg/L (48hr)</td>
</tr>
<tr>
<td>Tetrasodium EDTA 64-02-8</td>
<td>-</td>
<td>&gt;500mg/L (96hr)</td>
<td>&gt;100mg/L</td>
<td>&gt;100mg/L (48hr)</td>
</tr>
</tbody>
</table>
**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal of Wastes**

Although not a hazardous waste, the discarding or disposal of this material should be done at a properly permitted facility in accordance with the regulations of 40 CFR 262, 263, 264, and 268. Additionally, the discarding or disposal of the material may be further regulated by state, regional, or local regulations.

**Contaminated Packaging**

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

**14. TRANSPORT INFORMATION**

**Note**

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

**DOT**

UN1903, Disinfectant Liquid Corrosive, NOS (Quaternary Ammonium Compound), 8, PGIII 49 CFR §173.154 (Exemption)*: This product can ship as a “Limited Quantity” if packaged in 64oz containers. (Non-Hazardous).

**IATA**

**IMDG**

**Product AT USE DILUTION**

Not intended for transport.

**15. REGULATORY INFORMATION**

**International Inventories**

Not determined

**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
US Federal Regulations

CERCLA
None Listed

SARA 311/312 Hazard Categories
Immediate (Acute) Health, Delayed (Chronic) Health, Immediate Fire.

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

CWA (Clean Water Act)
None known.

US State Regulations
None known

U.S. State Right-to-Know Regulations
The following ingredients appear on various state right to know lists and/or California’s Proposition 65 List:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>State List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl Chloride 100-44-7 Trace&lt;100ppm</td>
<td>AZ, CA, CAP65, FL, IL, MA, MN, NJ, PA</td>
</tr>
<tr>
<td>Ethanol 64-17-5 &lt;0.5%</td>
<td>AZ, CA, CT, FL, ID, MA, MN, NJ, PA, RI</td>
</tr>
</tbody>
</table>

AZ: Arizona Ambient Air Quality Guidelines  
CT: Connecticut Hazardous Air Pollutants  
CA: California Director’s List of Hazardous Substances  
CAP65: California Prop65  
FL: Florida Substances List  
ID: Idaho Non-Carcinogen Toxic Air Pollutants  
MA: Massachusetts Right to Know List  
MN: Minnesota Hazardous Substances List  
NJ: New Jersey Right to Know List  
PA: Pennsylvania Right to Know List  
RI: Rhode Island Hazardous Substances List

FIFRA Label Information:
This chemical is a pesticide product registered by the United States Environmental Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use.

Danger  
Corrosive  
Causes irreversible eye damage and skin burns.  
Harmful if swallowed, inhaled or absorbed through the skin.

This product is toxic to fish and aquatic invertebrates.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
<tr>
<td>HMIS</td>
<td>Health Hazards</td>
<td>Flammability</td>
<td>Physical Hazards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
**Product AT USE DILUTION**

- Health Hazard: 1
- Flammability: 0
- Physical Hazards: 0
- Personal Protection: Not determined

**Issue Date**: 08-Aug-2011  
**Revision Date**: 18-Dec-2014  
**Revision Note**: Added At Use Dilution Information Version 1.1

**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.

Keep Out Of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

**End of Safety Data Sheet**