1. IDENTIFICATION

Product Identifier
Product Name: Buckeye Sani-Q2

Other means of identification
SDS #: BE-5680
Product Code: 5680
Registration Number(s): EPA Reg. No 6836-266-559
UN/ID No: UN1903

Recommended use of the chemical and restrictions on use
Recommended Use: EPA registered disinfectant.

Details of the supplier of the safety data sheet
Supplier Address: Buckeye International, Inc.
2700 Wagner Place
Maryland Heights, MO 63043 USA

Emergency Telephone Number
Company Phone Number: 1-314-291-1900
Emergency Telephone (24 hr): Transportation - INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)
Medical - (International) 1-651-632-8956 (North America) 1-800-303-0441

2. HAZARDS IDENTIFICATION

Emergency Overview: This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance: Clear liquid
Physical state: Liquid
Odor: Mild scent No fragrance added

Classification

<table>
<thead>
<tr>
<th>Skin corrosion/irritation</th>
<th>Category 1</th>
<th>Sub-category C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
<td></td>
</tr>
</tbody>
</table>

Signal Word
Danger

Hazard statements
Causes severe skin burns and eye damage
Combustible liquid
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

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a poison center or doctor/physician
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up

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

Other hazards
Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di-n-alkyl Dimethyl Ammonium Chloride</td>
<td>68424-95-3</td>
<td>&lt;7</td>
</tr>
<tr>
<td>Alkyl dimethyl benzyl ammonium chloride (C12-16)</td>
<td>68424-85-1</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>&lt;2</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

General Advice
Call a poison center or doctor immediately for treatment advice.

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.

Skin Contact
Take off contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. If redness or irritation occurs and persists, seek medical attention.

Inhalation
Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek medical attention for further treatment.

Ingestion
Have person sip a glass of water if able to swallow. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention to assess further treatment.
Most important symptoms and effects

Symptoms
May cause eye burns and permanent eye damage. Nausea. Headache. Direct contact with skin can cause irritation or redness.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically. If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Foam. Water spray (fog). Dry chemical.

Unsuitable Extinguishing Media
Not determined.

Specific Hazards Arising from the Chemical
Combustion products may be toxic. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous Combustion Products
Carbon oxides. Nitrogen oxides (NOx).

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
Use personal protective equipment as required.

Environmental precautions

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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

Methods for Clean-Up
Pick up with mop, wet/dry vac, or absorbent material. Rinse area with clear water and allow floor to dry before allowing traffic.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wear protective gloves/protective clothing and eye/face protection. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use. Store at room temperature. Protect from direct sunlight. Protect from extreme temperatures. Keep cool. Store locked up.

Packaging Materials
Rinse container before discarding.
**Incompatible Materials**

### 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>Ethyl Alcohol</td>
<td>STEL: 1000 ppm</td>
<td>TWA: 1000 ppm</td>
<td>IDLH: 3300 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 1900 mg/m³</td>
<td>TWA: 1000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 1000 ppm</td>
<td>TWA: 1000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 1900 mg/m³</td>
<td>TWA: 1900 mg/m³</td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**

**Engineering Controls**
Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

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

**Eye/Face Protection**
Refer to 29 CFR 1910.133 for eye and face protection regulations. Wear safety glasses or goggles to protect against exposure.

**Skin and Body Protection**
Refer to 29 CFR 1910.138 for appropriate skin and body protection. Wear rubber gloves or other impervious gloves.

**Respiratory Protection**
Refer to 29 CFR 1910.134 for respiratory protection requirements. No protective equipment is needed under normal use conditions.

**General Hygiene Considerations**
Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical state**
Liquid

**Appearance**
Clear liquid

**Color**
Clear

**Property**

<table>
<thead>
<tr>
<th>Value</th>
<th>Remarks / Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pH</strong></td>
<td>7.0 ± 0.5 (conc)</td>
</tr>
<tr>
<td></td>
<td>7.0 ± 0.5 (1:128 dilution)</td>
</tr>
<tr>
<td><strong>Melting Point/Freezing Point</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Boiling Point/Boiling Range</strong></td>
<td>100 °C / 212 °F</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>&gt;65 °C / &gt;149 °F</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Flammability (Solid, Gas)</strong></td>
<td>n/a-liquid</td>
</tr>
<tr>
<td><strong>Flammability Limits in Air</strong></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Relative Density</strong></td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Water Solubility</strong></td>
<td>Infinite</td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Partition Coefficient</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Auto-ignition Temperature</strong></td>
<td>Not determined</td>
</tr>
</tbody>
</table>
Decomposition Temperature  Not determined
Kinematic Viscosity  Not determined
Dynamic Viscosity  Not determined
Explosive Properties  Not determined
Oxidizing Properties  Not determined

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
See Sec. 7 Handling & Storage.

Incompatible Materials

Hazardous Decomposition Products
Carbon oxides. Nitrogen oxides (NOx). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact
Causes severe eye damage.

Skin Contact
Causes severe skin burns.

Inhalation
Do not inhale.

Ingestion
Do not ingest.

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>Alkyl dimethyl benzyl ammonium chloride (C12-16) 68424-85-1</td>
<td>= 426 mg/kg  ( Rat )</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ethyl Alcohol 64-17-5</td>
<td>= 7060 mg/kg  ( Rat )</td>
<td>-</td>
<td>= 124.7 mg/L  ( Rat ) 4 h</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
Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>A3</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend
ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
NTP (National Toxicology Program)
Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic life with long lasting effects.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td></td>
<td>12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100; 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static</td>
<td>10800: 24 h Daphnia magna mg/L EC50 2; 48 h Daphnia magna mg/L EC50 Static 9268 - 14221: 48 h Daphnia magna mg/L LC50</td>
</tr>
</tbody>
</table>

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>-0.32</td>
</tr>
</tbody>
</table>

Other Adverse Effects
Not determined

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
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**
- **UN/ID No**: UN1903
- **Proper Shipping Name**: Disinfectant, liquid, corrosive, n.o.s. (Dialkyldimethylammonium chloride)
- **Hazard Class**: 8
- **Packing Group**: III

**IATA**
- **UN/ID No**: UN1903
- **Proper Shipping Name**: Disinfectant, liquid, corrosive, n.o.s. (Dialkyldimethylammonium chloride)
- **Hazard Class**: 8
- **Packing Group**: III

**IMDG**
- **UN/ID No**: UN1903
- **Proper Shipping Name**: Disinfectant, liquid, corrosive, n.o.s. (Dialkyldimethylammonium chloride)
- **Hazard Class**: 8
- **Packing Group**: III

15. REGULATORY INFORMATION

**International Inventories**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/E LINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di-n-alkyl Dimethyl Ammonium Chloride</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Alkyl dimethyl benzyl ammonium chloride (C12-16)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Legend:**
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/E LINCS** - 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**

**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).
SARA 313
Not determined

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)

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol - 64-17-5</td>
<td>Carcinogen</td>
</tr>
<tr>
<td></td>
<td>Developmental</td>
</tr>
</tbody>
</table>

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>Ethyl Alcohol</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>64-17-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EPA Pesticide Registration Number EPA Reg. No 6836-266-559

EPA Statement
This chemical is a pesticide product registered by the Environmental Protection 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**EPA Pesticide Label**
Signal Word: Danger

Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Harmful if swallowed or absorbed through the skin. Wear protective eyewear (goggles, face shield or safety glasses), protective clothing and protective gloves (rubber, chemical resistant) when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse

Difference between SDS and EPA pesticide label

<table>
<thead>
<tr>
<th></th>
<th>EPA</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - oral</td>
<td>Harmful if swallowed</td>
<td>N/A</td>
</tr>
<tr>
<td>Acute toxicity - dermal</td>
<td>Harmful if absorbed through the skin</td>
<td>N/A</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes skin burns</td>
<td>Causes severe skin burns</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Causes irreversible eye damage</td>
<td>Causes serious eye damage</td>
</tr>
</tbody>
</table>
### 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>3</td>
<td>2</td>
<td>0</td>
<td></td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<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>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Issue Date:** 18-Aug-2014  
**Revision Date:** 15-Sep-2017  
**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*