1. IDENTIFICATION

Product Identifier
Product Name: Buckeye Watchdog NF

Other means of identification
SDS #: BE-5098
Product Code: 5098
UN/ID No: UN1760

Recommended use of the chemical and restrictions on use
Recommended Use: Cleaner, Disinfectant, Waterbased.

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: 1-651-632-8956 (International)
1-800-303-0441 (North America)
Emergency Telephone (24 hr): INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance: Clear, lime green solution
Physical State: Liquid
Odor: Fresh fragrance

Classification
- Skin corrosion/irritation: Category 1, Sub-category B
- Serious eye damage/eye irritation: Category 1

Hazards Not Otherwise Classified (HNOC)
May be harmful if swallowed

Signal Word
Danger

Hazard Statements
Causes severe skin burns and eye damage
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
Immediately call a poison center or doctor/physician
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/physician
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>Water</td>
<td>7732-18-5</td>
<td>&gt;84.55</td>
</tr>
<tr>
<td>Didecyldimethylammonium chloride</td>
<td>7173-51-5</td>
<td>4.225</td>
</tr>
<tr>
<td>Alkyl dimethyl benzyl ammonium chloride (C12-16)</td>
<td>68424-85-1</td>
<td>4.225</td>
</tr>
<tr>
<td>Tetrasodium EDTA</td>
<td>64-02-8</td>
<td>&lt;2</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>&lt;2</td>
</tr>
<tr>
<td>Alcohol Ethoxylate</td>
<td>34398-01-1</td>
<td>&lt;2</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>77-92-9</td>
<td>&lt;1</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**
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/physician.

**Skin Contact**
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Get medical attention.

**Inhalation**
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.

**Ingestion**
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Get medical attention.

**Most important symptoms and effects**

**Symptoms**
Causes severe skin burns and eye damage. Inhalation may cause headache and/or irritation of mucous membranes. Ingestion may cause nausea and headache.
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
Dry chemical. Carbon dioxide (CO2). Water spray (fog).

Unsuitable Extinguishing Media
Not determined.

Specific Hazards Arising from the Chemical
Combustion products may be toxic.

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
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

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. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep container closed when not in use. Store at room temperature. Do not contaminate water, food, or feed by storage or disposal. 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>64-17-5</td>
<td>TWA: 1900 mg/m³</td>
<td>TWA: 1000 ppm</td>
<td>TWA: 1000 ppm</td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 1000 ppm</td>
<td>(vacated) TWA: 1900 mg/m³</td>
<td>(vacated) TWA: 1900 mg/m³</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>-</td>
<td>15 mg / m³ (Total)</td>
<td>-</td>
</tr>
<tr>
<td>77-92-9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls


Individual protection measures, such as personal protective equipment

- Eye/Face Protection: Splash goggles or safety glasses.
- Skin and Body Protection: Rubber gloves. Suitable protective clothing.
- Respiratory Protection: Ensure adequate ventilation, especially in confined areas.

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

- Physical State: Liquid
- Appearance: Clear, lime green solution
- Color: Clear, lime green
- Odor: Fresh fragrance
- Odor Threshold: Not determined

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.4-7.8 (conc. and 1:32 dilution)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>100 °C / 212 °F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>None</td>
<td>Tag Closed Cup</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>1.0</td>
<td>(Water = 1)</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Infinite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 separated from incompatible substances. Keep out of reach of children.

Incompatible Materials

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact
Causes severe eye damage.

Skin Contact
Causes severe skin burns.

Inhalation
Avoid breathing vapors or mists.

Ingestion
May be harmful if swallowed.

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)</td>
<td>= 426 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>68424-85-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dodecyl(dimethylammonium chloride 7173-51-5</td>
<td>= 84 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tetrasodium EDTA 64-02-8</td>
<td>= 10 g/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>
<tr>
<td>Citric Acid 77-32-9</td>
<td>= 3000 mg/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**

The ingredient in this product is only classified as a carcinogen when consumed as an alcoholic beverage in long-term studies.

<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 64-17-5</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>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrasodium EDTA 64-02-8</td>
<td>1.01: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static</td>
<td>EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min</td>
<td>610: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Ethyl Alcohol 64-17-5</td>
<td>12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through</td>
<td>120: 72 h Daphnia magna LC50 Static</td>
<td>9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 30 min</td>
<td></td>
</tr>
<tr>
<td>Citric Acid 77-92-9</td>
<td>1516: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>120: 72 h Daphnia magna mg/L EC50</td>
<td></td>
<td></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 64-17-5</td>
<td>-0.32</td>
</tr>
<tr>
<td>Citric Acid 77-92-9</td>
<td>-1.72</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.

California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>Toxic Ignitable</td>
</tr>
<tr>
<td>64-17-5</td>
<td></td>
</tr>
</tbody>
</table>

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  UN1760
Proper Shipping Name Corrosive liquids, n.o.s. (Quaternary Ammonium Compounds)
Hazard Class 8
Packing Group II

IATA

UN/ID No  UN1760
Proper Shipping Name Corrosive liquids, n.o.s. (Quaternary Ammonium Compounds)
Hazard Class 8
Packing Group II

IMDG

UN/ID No  UN1760
Proper Shipping Name Corrosive liquids, n.o.s. (Quaternary Ammonium Compounds)
Hazard Class 8
Packing Group II

15. REGULATORY INFORMATION

International Inventories

TSCA
Listed

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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
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)
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, 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>
</tbody>
</table>

16. OTHER INFORMATION

NFPA
Health Hazards: 3
Flammability: 0
Instability: 0
Special Hazards: Not determined

HMIS
Health Hazards: Not determined
Flammability: Not determined
Physical Hazards: Not determined
Personal Protection: Not determined

Issue Date: 27-Dec-2011
Revision Date: 19-Aug-2014
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