



Safety Data Sheet

Issue Date: 18-Aug-2014

Revision Date: 18-Sep-2017

Version 2

1. IDENTIFICATION

Product Identifier

Product Name Buckeye ECO Sanitizer

Other means of identification

SDS # BE-6062

Product Code 6062
Registration Number(s) EPA Reg. No 6836-266-559
UN/ID No UN1760

Recommended use of the chemical and restrictions on use

Recommended Use EPA registered sanitizer.

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

| | |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category C |
| Serious eye damage/eye irritation | Category 1 |

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

If exposed or concerned: Get medical advice/attention
 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
 Take off contaminated clothing and wash it 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

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% |
|--|------------|----------|
| Di-n-alkyl Dimethyl Ammonium Chloride | 68424-95-3 | 4-8 |
| Alkyl dimethyl benzyl ammonium chloride (C12-16) | 68424-85-1 | 3-5 |
| Ethyl Alcohol | 64-17-5 | 0.5-3 |

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. Do not breathe dust/fume/gas/mist/vapors/spray. 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.

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 Chlorine bleach. Anionic detergents. Strong oxidizing agents. Strong reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------|----------------|--|--|
| Ethyl Alcohol 64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³ | IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³ |

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 | Odor | Mild scent No fragrance added |
| Appearance | Clear liquid | Odor Threshold | Not determined |
| Color | Clear | Remarks • Method | |
| Property | Values | | |
| pH | 7.0 ± 0.5 (conc) 7.0 ± 0.5 (1:512 dilution) | | |
| Melting Point/Freezing Point | Not determined | | |
| Boiling Point/Boiling Range | 100 °C / 212 °F | | |
| Flash Point | > 65 °C / > 149 °F | | Pensky-Martens Closed Cup (PMCC) Product does not support combustion. (Water = 1) |
| Evaporation Rate | 1.0 | | |
| Flammability (Solid, Gas) | n/a-liquid | | |
| Flammability Limits in Air | | | |
| Upper Flammability Limits | Not applicable | | |
| Lower Flammability Limit | Not applicable | | |
| Vapor Pressure | Not determined | | |
| Vapor Density | Not determined | | |
| Relative Density | 0.99 | | |
| Water Solubility | Infinite | | |
| Solubility in other solvents | Not determined | | |
| Partition Coefficient | Not determined | | |
| Auto-ignition Temperature | Not determined | | |

| | |
|----------------------------------|----------------|
| 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

Chlorine bleach. Anionic detergents. Strong oxidizing agents. Strong reducing agents.

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

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|----------------------|-------------|--------------------------|
| Alkyl dimethyl benzyl ammonium chloride (C12-16) 68424-85-1 | = 426 mg/kg (Rat) | - | - |
| Ethyl Alcohol 64-17-5 | = 7060 mg/kg (Rat) | - | = 124.7 mg/L (Rat) 4 h |

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.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--------------------------|-------|---------|-------|------|
| Ethyl Alcohol 64-17-5 | A3 | Group 1 | Known | X |

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

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|--------------------------|----------------------|--|---|
| Ethyl Alcohol 64-17-5 | | 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 | 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 |

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

| Chemical Name | Partition Coefficient |
|--------------------------|-----------------------|
| Ethyl Alcohol 64-17-5 | -0.32 |

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

| Chemical Name | California Hazardous Waste Status |
|--------------------------|-----------------------------------|
| Ethyl Alcohol 64-17-5 | Toxic Ignitable |

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 liquid, n.o.s. (Dialkyldimethylammonium chloride)
Hazard Class 8
Packing Group III

IATA

UN/ID No UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Dialkyldimethylammonium chloride)
Hazard Class 8
Packing Group III

IMDG

UN/ID No UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Dialkyldimethylammonium chloride)
Hazard Class 8
Packing Group III

15. REGULATORY INFORMATION**International Inventories**

| Chemical Name | TSCA | DSL/NDSL | EINECS/E LINCS | ENCS | IECSC | KECL | PICCS | AICS |
|--|------|----------|-------------------|---------|-------|---------|-------|------|
| Di-n-alkyl Dimethyl Ammonium Chloride | X | X | X | Present | X | Present | X | X |
| Alkyl dimethyl benzyl ammonium chloride (C12-16) | X | X | X | Present | X | Present | X | X |
| Ethyl Alcohol | X | X | X | Present | X | Present | X | X |

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

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.

| Chemical Name | California Proposition 65 |
|-------------------------|-----------------------------|
| Ethyl Alcohol - 64-17-5 | Carcinogen Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------|------------|---------------|--------------|
| Ethyl Alcohol 64-17-5 | X | X | X |

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

| | EPA | OSHA |
|-------------------------------|--------------------------------------|---------------------------|
| Signal Word | Danger | Danger |
| Acute toxicity – oral | Harmful if swallowed | N/A |
| Acute toxicity – dermal | Harmful if absorbed through the skin | N/A |
| Skin corrosion/irritation | Causes skin burns | Causes severe skin burns |
| Serious eye damage/irritation | Causes irreversible eye damage | Causes serious eye damage |

| |
|------------------------------|
| 16. OTHER INFORMATION |
|------------------------------|

| | | | | |
|--------------------|-----------------------|---------------------|-------------------------|----------------------------|
| <u>NFPA</u> | Health Hazards | Flammability | Instability | Special Hazards |
| | 3 | 2 | 0 | Not determined |
| <u>HMIS</u> | Health Hazards | Flammability | Physical hazards | Personal Protection |
| | Not determined | Not determined | Not determined | Not determined |

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Revision Date: 18-Sep-2017
Revision Note: Regulatory Update

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