

Safety Data Sheet

Issue Date: 27-Dec-2011

Revision Date: 03-Dec-2018

Version 4

1. IDENTIFICATION

Product identifier

Product Name Buckeye Eco Neutral Disinfectant
E-23

Other means of identification

SDS # BE-6023

Product Code 6023
Registration Number(s) EPA Reg. No. 47371-129-559
UN/ID No UN1760

Recommended use of the chemical and restrictions on use

Recommended Use EPA Registered Germicidal Cleaner.

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) 1-615-632-8956 (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 green liquid **Physical state** Liquid **Odor** Lemon fragrance

Classification

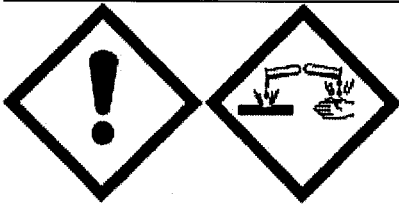
Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Signal Word

Danger

Hazard statements

Harmful if swallowed
Causes severe skin burns and eye damage

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dusts or mists

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor
 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): Take off immediately all contaminated clothing. Rinse skin with water/ shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Immediately call a POISON CENTER or doctor
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
 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

Chemical name	CAS No	Weight-%
Didecyldimethylammonium chloride	7173-51-5	10-20
Alkyl dimethyl benzyl ammonium chloride (C12-16)	68424-85-1	<10
Ethyl Alcohol	64-17-5	<10
Sodium hydroxide	1310-73-2	<5
Alkyloxypolyethyleneoxyethanol	84133-50-6	<5
EDTA	60-00-4	<5

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

Description of 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. Seek immediate medical attention/advice.

Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration.
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.

Most important symptoms and effects, both acute and delayed

Symptoms	Contact may cause irritation and redness. Direct eye contact may cause stinging, tearing and redness. May cause redness, pain, and severe skin burns. May cause irritation to the mucous membranes and upper respiratory tract. Ingestion may cause nausea and headache.
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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. Measures against circulatory shock, respiratory depression, and convulsions may be needed.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water spray (fog). Dry powder. Foam.

Unsuitable Extinguishing Media Not determined.**Specific Hazards Arising from the Chemical**

Toxic fumes may be given off when material is exposed to fire.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx). Hydrogen chloride.**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** Collect spillage. 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 Keep out of the reach of children. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature. Keep container closed when not in use. Do not contaminate water, food, or feed by storage or disposal.

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
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Splash goggles or safety glasses.

Skin and Body Protection Rubber gloves. Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

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	Lemon fragrance
Appearance	Clear green liquid	Odor Threshold	Not determined
Color	Green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7.6 ± 0.2 (conc) 7.0 ± 0.2 (1:256 dilution)	
Melting point / freezing point	Not determined	
Boiling point / boiling range	100 °C / 212 °F	
Flash point	93.3 °C / ~ 200 °F	Tag Closed Cup
Evaporation Rate	1.0	(n-BuAc =1)

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Flammability (Solid, Gas)	n/a-liquid	
Flammability Limit in Air		
Upper flammability or explosive limits	Not applicable	
Lower flammability or explosive limits	Not applicable	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	1.00	
Water Solubility	Mostly Soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition 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

Keep out of reach of children.

Incompatible materials

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

Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases or 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

Avoid breathing vapors or mists.

Ingestion

Harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Didecyldimethylammonium chloride 7173-51-5	= 84 mg/kg (Rat)	-	-
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
Sodium hydroxide 1310-73-2	140 - 340 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Alkyloxypolyethyleneoxyethanol 84133-50-6	= 2100 mg/kg (Rat)	-	-
EDTA 60-00-4	> 2000 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics**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**

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50	1,754.50 mg/kg
Dermal LD50	39,646.80 mg/kg
ATEmix (inhalation-dust/mist)	1,893.40 mg/L

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		100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/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
Sodium hydroxide 1310-73-2		45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	
Alkyloxypolyethyleneoxyethanol 84133-50-6		3.2: 96 h Pimephales promelas mg/L LC50	3.2: 48 h water flea mg/L EC50

EDTA 60-00-4	1.01: 72 h Desmodesmus subspicatus mg/L EC50	34 - 62: 96 h Lepomis macrochirus mg/L LC50 static 44.2 - 76.5: 96 h Pimephales promelas mg/L LC50 static	113: 48 h Daphnia magna mg/L EC50 Static
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Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

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
Sodium hydroxide 1310-73-2	Toxic Corrosive

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. (Alkyldimethylbenzyl ammonium chloride)
Hazard class	8
Packing Group	II

IATA

UN number	UN1760
Proper Shipping Name	Corrosive liquids, n.o.s. (Alkyldimethylbenzyl ammonium chloride)
Transport hazard class(es)	8
Packing Group	II

IMDG

UN number UN1760
 Proper Shipping Name Corrosive liquids, n.o.s. (Alkyldimethylbenzyl ammonium chloride)
 Transport hazard class(es) 8
 Packing Group II

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Didecyldimethylammonium chloride	X	X	X	X	X	X	X	X
Alkyl dimethyl benzyl ammonium chloride (C12-16)	X	X	X	X	X	X	X	X
Ethyl Alcohol	X	X	X	X	X	X	X	X
Sodium hydroxide	X	X	X	X	X	X	X	X
Alkyloxypolyethyleneoxyethanol	X	X			X	X	X	X
EDTA	X	X	X	X	X	X	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

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium hydroxide 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
EDTA 60-00-4	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
 Chronic Health Hazard No
 Fire Hazard No
 Sudden Release of Pressure Hazard No
 Reactive Hazard No

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)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide	1000 lb			X
EDTA	5000 lb			X

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
Sodium hydroxide 1310-73-2	X	X	X
EDTA 60-00-4	X	X	X

EPA Pesticide Registration Number EPA Reg. No. 47371-129-559**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. Harmful if inhaled, swallowed or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, face shield or safety glasses), protective clothing and protective gloves (rubber or chemical resistant). Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Danger	Danger
Acute Toxicity - Oral	Harmful if swallowed	Harmful if swallowed
Acute Toxicity – Dermal	Harmful if absorbed through the skin	N/A
Acute Toxicity – Inhalation	Harmful if inhaled	N/A
Skin corrosion/irritation	Causes skin burns	Causes severe skin burns
Serious eye damage/eye irritation	Causes irreversible eye damage	Causes serious eye damage

16. OTHER INFORMATION

NFPA

Health Hazards

Flammability

Instability

Special Hazards

3

1

0

HMS

Health Hazards

Flammability

Physical hazards

Personal Protection

Not determined

Not determined

Not determined

Not determined

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Revision Note: New formula

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