Buckos	Safe [®]	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			
Other means of identification SDS #	BE-6023			
Product Code Registration Number(s) UN/ID No	6023 EPA Reg. No. 47371-129-559 UN1760			
Recommended use of the chemic Recommended Use	al and restrictions on use EPA Registered Germicidal Cleaner.			
Supplier Address Buckeye International, Inc. 2700 Wagner Place Maryland Heights, MO 63043 USA <u>Emergency telephone number</u> Company Phone Number Emergency Telephone (24 hr)	1-314-291-1900 Transportation - INFOTRAC 1-352-323-3500 (Ir 1-800-535-5053 (North America) Medical – (International) 1-615-632-8956 (North	,		
	2. HAZARDS IDENTIFICATION			
labeling requirements under federa	mical is a product registered by the Environmental F I law. These requirements differ from the classificat orkplace labels of non-EPA registered chemicals. F information.	ion criteria and hazard information required		
Appearance Clear green liquid	Physical state Liquid	Odor Lemon fragrance		
<u>Classification</u>				
Acute toxicity - Oral Skin corrosion/irritation Serious eye damage/eye irritation		Category 4 Category 1 Sub-category B Category 1		
<u>Signal Word</u> Danger				
Hazard statements				

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.
ost important symptoms	and effects, both acute and delayed

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.

Indication of any immediate medical attention and special treatment needed

Notes to PhysicianTreat 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.

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, includ	ing 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	STEL: 1000 ppm	TWA: 1000 ppm	IDLH: 3300 ppm
64-17-5		TWA: 1900 mg/m ³	TWA: 1000 ppm
		(vacated) TWA: 1000 ppm	TWA: 1900 mg/m ³
		(vacated) TWA: 1900 mg/m ³	-
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2		(vacated) Ceiling: 2 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 Consideration	ns 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 Appearance Color	Liquid Clear green liquid Green	Odor Odor Threshold	Lemon fragrance Not determined
Property pH Melting point / freezing point Boiling point / boiling range Flash point	Values 7.6 ± 0.2 (conc) 7.0 ± 0.2 (1:256 dilution) Not determined 100 °C / 212 °F 93.3 °C / ~ 200 °F	Remarks • Method	
Evaporation Rate	1.0	(n-BuAc =1)	

Remarks • Method

Property	Values
Flammability (Solid, Gas)	n/a-liquid
Flammability Limit in Air	
Upper flammability or explosive	Not applicable
limits	
Lower flammability or explosive	Not applicable
limits	
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	Х

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		100: 96 h Pimephales promelas	10800: 24 h Daphnia magna mg/L
64-17-5		mg/L LC50 static 13400 - 15100: 96	EC50 2: 48 h Daphnia magna mg/L
		h Pimephales promelas mg/L LC50	EC50 Static 9268 - 14221: 48 h
		flow-through 12.0 - 16.0: 96 h	Daphnia magna mg/L LC50
		Oncorhynchus mykiss mL/L LC50	
		static	
Sodium hydroxide		45.4: 96 h Oncorhynchus mykiss	
1310-73-2		mg/L LC50 static	
Alkyloxypolyethyleneoxyethanol		3.2: 96 h Pimephales promelas	3.2: 48 h water flea mg/L EC50
84133-50-6		mg/L LC50	-
		-	

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	113: 48 h Daphnia magna mg/L EC50 Static
		static	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

<u>Mobility</u>

Chemical name	Partition coefficient
Ethyl Alcohol	-0.32
64-17-5	

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	Toxic	
64-17-5	Ignitable	
Sodium hydroxide	Toxic	
1310-73-2	Corrosive	

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u> UN/ID No Proper Shipping Name Hazard class Packing Group	UN1760 Corrosive liquids, n.o.s. (Alkyldimethylbenzyl ammonium chloride) 8 II
<u>IATA</u> UN number Proper Shipping Name Transport hazard class(es) Packing Group	UN1760 Corrosive liquids, n.o.s. (Alkyldimethylbenzyl ammonium chloride) 8 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	Х	X	Х	Х	Х	Х	Х	Х
Alkyl dimethyl benzyl ammonium chloride (C12-16)	Х	Х	Х	Х	Х	Х	Х	Х
Ethyl Alcohol	Х	Х	Х	Х	Х	Х	Х	Х
Sodium hydroxide	Х	Х	Х	Х	Х	Х	Х	Х
Alkyloxypolyethyleneoxyetha nol	Х	Х			Х	Х	Х	Х
EDTA	Х	Х	Х	Х	Х	Х	Х	Х

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	1000 lb		RQ 1000 lb final RQ
1310-73-2			RQ 454 kg final RQ
EDTA	5000 lb		RQ 5000 lb final RQ
60-00-4			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			Х
EDTA	5000 lb			Х
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	Х	Х	Х
Sodium hydroxide 1310-73-2	Х	Х	Х
EDTA 60-00-4	Х	Х	Х

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

<u>NFPA</u> HMIS	Health Hazards 3 Health Hazards Not determined	Flammability 1 Flammability Not determined	Instability 0 Physical hazards Not determined	Special Hazards Not determined Personal Protection Not determined
Issue Date: Revision Date:	27-Dec-2011 03-Dec-2018			

New formula

Disclaimer

Revision Note:

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