



Safety Data Sheet

Issue Date: 27-Dec-2011

Revision Date: 03-Dec-2018

Version 3

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

SDS # BE-6023-EU
Product Code 6023
Product Name Buckeye Eco Neutral Disinfectant

Contains Sodium hydroxide, Didecyldimethylammonium chloride, Alkyl dimethyl benzyl ammonium chloride (C12-16), Ethyl alcohol

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Germicidal cleaner

1.3. Details of the Supplier of the Safety Data Sheet

Importer	REACH Only representative	Supplier
UK Contact	TSGE	Buckeye International, Inc.
Lewis Kirby, EU General Manager	TSGE@TSGEurope.com	2700 Wagner Place
25 Frances Brady Way		Maryland Heights, MO 63043 USA
Kingston Upon Hull		
HU9 3BW UK		

For further information, please contact

Contact Point Lewis Kirby, EU General Manager: +4407792782066
 Buckeye International, Inc.: 1-314-291-1900
Email Address info@buckeyeinternational.com

1.4. Emergency telephone number

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

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 1 Sub-category B - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label Elements

Product Identifier
 Contains Sodium hydroxide, Didecyldimethylammonium chloride, Alkyl dimethyl benzyl ammonium chloride (C12-16), Ethyl alcohol

**Signal Word**

Danger

Hazard statements

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P260 - Do not breathe dusts or mists

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P273 - Avoid release to the environment

P391 - Collect spillage

P310 - Immediately call a POISON CENTER or doctor/physician

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

P331 - Do NOT induce vomiting

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other Hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2 MIXTURES**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Didecyltrimethylammonium chloride	Present	7173-51-5	7-13	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318)	Not determined
Ethyl Alcohol	Present	64-17-5	1-5	Flam. Liq. 2 (H225)	Not determined
Sodium hydroxide	Present	1310-73-2	1-5	Skin Corr. 1A (H314)	Not determined
EDTA	Present	60-00-4	1-5	Eye Irrit. 2 (H319)	Not determined

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 4: FIRST AID MEASURES**4.1. 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.

4.2. 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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4.3. 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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Section 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media

Water spray (fog). Dry powder. Foam.

Unsuitable Extinguishing Media

Not determined.

5.2. Special Hazards Arising from the Substance or Mixture

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

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx). Hydrogen chloride.

5.3. Advice for Firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Use personal protective equipment as required.

For Emergency Responders

Use personal protection recommended in Section 8.

6.2. Environmental Precautions

Collect spillage. See Section 12 for additional Ecological Information.

6.3. 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.

6.4. Reference to Other Sections

See Section 13: DISPOSAL CONSIDERATIONS.

Section 7: HANDLING AND STORAGE

7.1. 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/vapours/spray. Avoid release to the environment.

General Hygiene Considerations

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

7.2. 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.

7.3. Specific End Use(s)

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Ethyl Alcohol 64-17-5	-	STEL: 3000 ppm STEL: 5760 mg/m ³ TWA: 1000 ppm TWA: 1920 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³	STEL: 1000 ppm STEL: 1910 mg/m ³	TWA: 200 ppm TWA: 380 mg/m ³
Sodium hydroxide 1310-73-2	-	STEL: 2 mg/m ³	TWA: 2 mg/m ³	STEL: 2 mg/m ³	-
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Ethyl Alcohol 64-17-5	-	TWA: 1000 ppm	Skin STEL: 1900 mg/m ³ TWA: 260 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 1300 ppm STEL: 2500 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³
Sodium hydroxide 1310-73-2	-	Ceiling: 2 mg/m ³	-	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Ethyl Alcohol 64-17-5	STEL 2000 ppm STEL 3800 mg/m ³ TWA: 1000 ppm TWA: 1900 mg/m ³	STEL: 1000 ppm STEL: 1920 mg/m ³ TWA: 500 ppm TWA: 960 mg/m ³	TWA: 1900 mg/m ³	TWA: 500 ppm TWA: 950 mg/m ³ STEL: 625 ppm STEL: 1187.5 mg/m ³	STEL: 1000 ppm
Sodium hydroxide 1310-73-2	STEL 4 mg/m ³ TWA: 2 mg/m ³	STEL: 2 mg/m ³ TWA: 2 mg/m ³	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³

8.2. Exposure Controls

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

Personal Protective Equipment

Eye/Face Protection Splash goggles or safety glasses.
Hand Protection Rubber gloves.
Skin and Body Protection Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory Protection Ensure adequate ventilation, especially in confined areas.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on Basic Physical and Chemical Properties**

Physical state	Liquid		
Appearance	Clear green liquid	Odour	Lemon fragrance
Colour	Green	Odour Threshold	Not determined
Property	Values	Remarks • Method	
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 °C / ~ 200 °F	Tag Closed Cup	
Evaporation Rate	1.0	(n-BuAc =1)	
Flammability (Solid, Gas)	Liquid-Not applicable		
Flammability Limit in Air			
Upper flammability or explosive limits	Not applicable		
Lower flammability or explosive limits	Not applicable		
Vapour Pressure	Not determined		
Vapour Density	Not determined		
Relative Density	1.00		
Water Solubility	Mostly Soluble		
Solubility(ies)	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		
Oxidising Properties	Not determined		

Section 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Not reactive under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of Hazardous Reactions**Hazardous Polymerisation**

Hazardous polymerisation does not occur.

Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

Keep out of reach of children.

10.5. Incompatible Materials

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

10.6. Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases or vapors.

Section 11: TOXICOLOGICAL INFORMATION**11.1. Information on Toxicological Effects****Acute toxicity****Product Information**

Inhalation	Avoid breathing vapours or mists.
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Ingestion	Harmful if swallowed.

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

ATEmix (oral)	1,754.50 mg/kg
ATEmix (dermal)	54,000.00 mg/kg
ATEmix (inhalation-dust/mist)	2,494.00 mg/L

Unknown Acute Toxicity

- 0 % of the mixture consists of ingredient(s) of unknown toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Didecyltrimethylammonium chloride	= 84 mg/kg (Rat)		
Alkyl dimethyl benzyl ammonium chloride (C12-16)	= 426 mg/kg (Rat)		
Ethyl Alcohol	= 7060 mg/kg (Rat)		= 124.7 mg/L (Rat) 4 h
Sodium hydroxide	140 - 340 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	
Alkyloxypolyethyleneoxyethanol	= 2100 mg/kg (Rat)		
EDTA	> 2000 mg/kg (Rat)		

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/eye irritation	Causes severe eye damage.
Sensitisation	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.

STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ethyl Alcohol		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		45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	
EDTA	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

12.2. Persistence and Degradability

Not determined.

12.3. Bioaccumulative Potential

Chemical name	Partition coefficient
Ethyl Alcohol	-0.32

12.4. Mobility in Soil

Not determined

12.5. Results of PBT and vPvB Assessment

Not determined.

12.6. Other Adverse Effects

Not determined.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Improper disposal or reuse of this container may be dangerous and illegal.

Section 14: TRANSPORT INFORMATION

Note	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances
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IMDG

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

RID

14.1 UN/ID No	UN1760
14.2 Proper Shipping Name	Corrosive liquids, n.o.s. (Alkyldimethylbenzyl ammonium chloride)
14.3 Transport hazard class(es)	8
14.4 Packing Group	II

ADR

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

IATA

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

Section 15: REGULATORY INFORMATION**15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture****National Regulations**

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Ethyl Alcohol 64-17-5	RG 84	

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Export Notification requirements

This product contains substances which are regulated pursuant to Regulation (EC) No. 689/2008 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 649/2012 - Annex Number
Didecyldimethylammonium chloride - 7173-51-5	I.1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

Component	TSCA	DSL/NDSL	EINECS/ELINCS	PICCS	ENCS	IECSC	AICS	KECL
Didecyldimethylammonium chloride 7173-51-5 (7-13)	X	X	X	X	X	X	X	X
Alkyl dimethyl benzyl ammonium chloride (C12-16) 68424-85-1 (3-7)	X	X	X	X	X	X	X	X
Ethyl Alcohol 64-17-5 (1-5)	X	X	X	X	X	X	X	X
Sodium hydroxide 1310-73-2 (1-5)	X	X	X	X	X	X	X	X
Alkyloxypolyethyleneoxyethanol 84133-50-6 (1-5)	X	X	-	X	-	X	X	X
EDTA 60-00-4 (1-5)	X	X	X	X	X	X	X	X

Legend

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

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Section 16: OTHER INFORMATION**Full text of H-Statements referred to under section 3**

H225 - Highly flammable liquid and vapour

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

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Skin designation

Classification Procedure

Calculation method

Issue Date: 27-Dec-2011

Revision Date: 03-Dec-2018

Revision Note: New formula.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2015/830

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