



# Safety Data Sheet

Issue Date: 27-Dec-2011

Revision Date: 02-Aug-2013

Version 1

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

### 1.1. Product Identifier

SDS # BE-6023-EU  
Product Code 6023, 6021-E21, 6023-E/S23  
PCS Number 97858  
Product Name Buckeye Eco Neutral Disinfectant

### 1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended Use Cleaner Disinfectant Waterbased

### 1.3. Details of the Supplier of the Safety Data Sheet

#### Importer

UK Contact  
David Pinder, EU General Manager  
12 Paskin Close  
Fradley Village, NR Lichfield  
Staffordshire, WS13 8NZ UK

#### Manufacturer

TSGE  
TSGE@TSGEurope.com

#### Supplier

Buckeye International, Inc.  
2700 Wagner Place  
Maryland Heights, MO 63043 USA

### For further information, please contact

Contact Point David Pinder, EU General Manager: 011447788432884  
Buckeye International, Inc.: 1-314-291-1900  
Email Address info@buckeyeinternational.com

### 1.4. Emergency telephone number

Emergency Telephone (24 hr) 1-651-632-8956 (International)  
1-800-303-0441 (North America)  
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

Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Chronic aquatic toxicity	Category 3

Classification according to 67/548/EEC

Full text of R-phrases: see section 16

#### Hazard Symbols

C - Corrosive

**R-code(s)**

C;R34

**2.2. Label Elements**

Labeling according to Regulation (EC) No. 1272/2008 [CLP].

**Signal Word**

Danger

**Hazard Statements**

H314 - Causes severe skin burns and eye damage

H412 - Harmful 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 dust/fume/gas/mist/vapors/spray

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

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

P363 - Wash contaminated clothing before reuse

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

P310 - Immediately call a POISON CENTER or doctor/physician

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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

P405 - Store locked up

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

P273 - Avoid release to the environment

**2.3. Other Hazards****General Hazards**

None known

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**

Chemical Name	EC No	CAS No	Weight-%	Classification according to 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Didecyldimethylammonium chloride	Present	7173-51-5	8.45	Xn; R22 C; R34	Acute Tox. 4 (H302) Skin Corr. 1B (H314)	Not determined
Tetrasodium EDTA	Present	64-02-8	<5	Xn; R22 Xi; R41	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	Not determined
Ethyl Alcohol	Present	64-17-5	<4	F; R11	Flam. Liq. 2 (H225)	Not determined
Sodium hydroxide	Present	1310-73-2	<2	C; R35	Skin Corr. 1A (H314) Met. Corr. 1 (H290) Eye Dam. 1 (H318)	Not determined

Full text of R-phrases: see section 16

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

## Section 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

<b>General Advice</b>	Call a poison center or doctor immediately for treatment advice.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately.
<b>Ingestion</b>	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. Call a physician or poison control center immediately.

### 4.2. Most Important Symptoms and Effects, Both Acute and Delayed

<b>Symptoms</b>	Headache. Nausea. Contact will cause irritation and redness to exposed areas. May cause redness, pain, and severe skin burns. May cause eye burns and permanent eye damage.
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### 4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

<b>Notes to Physician</b>	Treat symptomatically. Possible mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock and convulsions may be necessary.
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## Section 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

#### **Suitable Extinguishing Media**

Water. Dry chemical. Foam.

#### **Unsuitable Extinguishing Media**

Not determined.

### 5.2. Special Hazards Arising from the Substance or Mixture

Combustion products may be toxic. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

<b>Hazardous Combustion Products</b>	Carbon oxides. Nitrogen oxides (NOx). Hydrogen chloride.
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### 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.

**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. Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8. Avoid release to the environment.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling. Take off all contaminated clothing and wash it 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. Store locked up.

**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 <sup>3</sup> TWA: 1000 ppm TWA: 1920 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> STEL: 5000 ppm STEL: 9500 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1910 mg/m <sup>3</sup>	TWA: 500 ppm TWA: 960 mg/m <sup>3</sup> Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m <sup>3</sup> Skin
Sodium hydroxide 1310-73-2		STEL: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>	

Component	Italy	Portugal	Netherlands	Finland	Denmark
Ethyl Alcohol 64-17-5 (<4)		TWA: 1000 ppm	Skin STEL: 1900 mg/m <sup>3</sup> TWA: 260 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> STEL: 1300 ppm STEL: 2500 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
Sodium hydroxide 1310-73-2 (<2)		Ceiling: 2 mg/m <sup>3</sup>		STEL: 2 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Ethyl Alcohol 64-17-5	STEL 2000 ppm STEL 3800 mg/m <sup>3</sup> TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	STEL: 1000 ppm STEL: 1920 mg/m <sup>3</sup> TWA: 500 ppm TWA: 960 mg/m <sup>3</sup>	TWA: 1900 mg/m <sup>3</sup>	TWA: 500 ppm TWA: 950 mg/m <sup>3</sup> STEL: 625 ppm STEL: 1187.5 mg/m <sup>3</sup>	STEL: 1000 ppm
Sodium hydroxide 1310-73-2	STEL 4 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	STEL: 1 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>

**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** No protective equipment is needed under normal use conditions.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on Basic Physical and Chemical Properties**

<b>Physical State</b>	Liquid		
<b>Appearance</b>	Clear dark aqua solution	<b>Odour</b>	Fresh clean odor
<b>Colour</b>	Dark aqua	<b>Odour Threshold</b>	Not determined
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	7.6 ± 0.2 (conc) 7.0 ± 0.2 (1:256 dilution)		
<b>Melting Point/Freezing Point</b>	Not determined		
<b>Boiling Point/Boiling Range</b>	100 °C / 212 °F		
<b>Flash Point</b>	~93 °C / ~200 °F	Tag Closed Cup	
<b>Evaporation Rate</b>	1.0	(Water = 1)	
<b>Flammability (Solid, Gas)</b>	n/a-liquid		
<b>Flammability Limits in Air</b>			
<b>Upper Flammability Limits</b>	Not applicable		
<b>Lower Flammability Limit</b>	Not applicable		
<b>Vapour Pressure</b>	Not determined		
<b>Vapour Density</b>	Not determined		
<b>Relative Density</b>	Not determined		
<b>Water Solubility</b>	Infinite		
<b>Solubility(ies)</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Auto-ignition Temperature</b>	Not determined		
<b>Decomposition Temperature</b>	Not determined		
<b>Kinematic Viscosity</b>	Not determined		
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	Not determined		
<b>Oxidising Properties</b>	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 Polymerization**

Hazardous polymerization 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

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

### 10.6. Hazardous Decomposition Products

Nitrogen oxides (NOx). Carbon oxides. Hydrogen chloride gas.

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects

#### **Acute Toxicity**

#### **Product Information**

**Eye Contact** Causes severe eye damage.

**Skin Contact** Causes severe skin burns.

**Unknown Acute Toxicity** 10% of the mixture consists of ingredient(s) of unknown toxicity.

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

Oral LD50	2,114.00
Units	mg/kg
Dermal LD50	67,500.00
Units	mg/kg
Inhalation	
Mist	3,117.50
Units	mg/L
Vapor	3,117.50
Units	mg/L

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Alkyl dimethyl benzyl ammonium chloride (C12-16)	= 426 mg/kg ( Rat )		
Didecyldimethylammonium chloride	= 84 mg/kg ( Rat )		
Tetrasodium EDTA	= 10 g/kg ( Rat )		
Ethyl Alcohol	= 7060 mg/kg ( Rat )		= 124.7 mg/L ( Rat ) 4 h
Sodium hydroxide		= 1350 mg/kg ( Rabbit )	

<b>Skin corrosion/irritation</b>	Not classified.
<b>Serious eye damage/eye irritation</b>	Not classified.
<b>Sensitization</b>	Not classified.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	None known based on information supplied.
<b>Reproductive toxicity</b>	Not classified.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Symptoms</b>	Please see section 4 of this SDS for symptoms.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Harmful to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Tetrasodium EDTA	1.01: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	41: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 59.8: 96 h <i>Pimephales promelas</i> mg/L LC50 static	610: 24 h <i>Daphnia magna</i> mg/L EC50
Ethyl Alcohol		12.0 - 16.0: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static 13400 - 15100: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	9268 - 14221: 48 h <i>Daphnia magna</i> mg/L LC50 10800: 24 h <i>Daphnia magna</i> mg/L EC50 2: 48 h <i>Daphnia magna</i> mg/L EC50 Static
Sodium hydroxide		45.4: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 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

#### **Mobility**

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

<b>Waste from Residues / Unused Products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.

## Section 14: TRANSPORT INFORMATION

### IMDG

<b>14.1 UN/ID No</b>	UN1760
<b>14.2 Proper Shipping Name</b>	Corrosive liquid, n.o.s. (Dimethyl benzyl ammonium chloride, Sodium hydroxide)
<b>14.3 Hazard Class</b>	8
<b>14.4 Packing Group</b>	III
<b>14.5</b>	
<b>14.6</b>	
<b>14.7</b>	

### RID

<b>14.1 UN/ID No</b>	UN1760
<b>14.2 Proper Shipping Name</b>	Corrosive liquid, n.o.s. (Dimethyl benzyl ammonium chloride, Sodium hydroxide)
<b>14.3 Hazard Class</b>	8
<b>14.4 Packing Group</b>	III
<b>14.5</b>	
<b>14.6</b>	

### ADR

<b>14.1 UN/ID No</b>	UN1760
<b>14.2 Proper Shipping Name</b>	Corrosive liquid, n.o.s. (Dimethyl benzyl ammonium chloride, Sodium hydroxide)
<b>14.3 Hazard Class</b>	8
<b>14.4 Packing Group</b>	III
<b>14.5</b>	
<b>14.6</b>	

### ICAO (air)

<b>14.1 UN/ID No</b>	UN1760
<b>14.2 Proper Shipping Name</b>	Corrosive liquid, n.o.s. (Dimethyl benzyl ammonium chloride, Sodium hydroxide)
<b>14.3 Hazard Class</b>	8
<b>14.4 Packing Group</b>	III
<b>14.5</b>	
<b>14.6</b>	

### IATA

<b>14.1 UN/ID No</b>	UN1760
<b>14.2 Proper Shipping Name</b>	Corrosive liquid, n.o.s. (Dimethyl benzyl ammonium chloride, Sodium hydroxide)
<b>14.3 Hazard Class</b>	8
<b>14.4 Packing Group</b>	III
<b>14.5</b>	
<b>14.6</b>	



## Section 15: REGULATORY INFORMATION

### 15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

#### 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 .

#### International Inventories

TSCA	Listed
EINECS/ELINCS	-
DSL/NDSL	-
PICCS	-
ENCS	-
IECSC	-
AICS	-
KECL	-

#### 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****Safety Data Sheet Status**

The Risk Phrases/Hazard Statements listed below in Section 16 are related to the Raw Materials (ingredients) in the Product (as listed in Section 3) and NOT only the product itself. For the Risk Phrases/Hazard Statements relating to this Product see Section 2.

**Full text of R-phrases referred to under sections 2 and 3**

R22 - Harmful if swallowed

R34 - Causes burns

R41 - Risk of serious damage to eyes

R11 - Highly flammable

R35 - Causes severe burns

**Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H225 - Highly flammable liquid and vapor

H290 - May be corrosive to metals

**Classification Procedure**

Calculation method

**Issue Date:** 27-Dec-2011

**Revision Date:** 02-Aug-2013

**Revision Note:** New format.

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Regulation (EU) No. 453/2010**

**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