



Safety Data Sheet

Issue Date: 27-Dec-2011

Revision Date: 20-Sep-2017

Version 2

1. IDENTIFICATION

Product Identifier

Product Name Buckeye Supergard

Other means of identification

SDS # BE-5085

Product Code 5085
Registration Number(s) EPA Reg. No 3862-178-559
UN/ID No UN2924

Recommended use of the chemical and restrictions on use

Recommended Use EPA registered disinfectant.

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 Dark amber to purple liquid **Physical state** Liquid **Odor** Pleasant lemon fragrance

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 3

Signal Word

Danger

Hazard statements

Harmful if inhaled
Causes severe skin burns and eye damage
May cause an allergic skin reaction
May cause damage to organs through prolonged or repeated exposure
Flammable liquid and vapor

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof equipment
Use only non-sparking tools
Take precautionary measures against static discharge

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): Take off immediately all contaminated clothing. Rinse skin with water/ shower
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Immediately call a poison center or doctor/physician
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
In case of fire: Use CO₂, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

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-%
Para-tertiary Amylphenol	80-46-6	10
Ethylene glycol	107-21-1	1-10
Ortho-benzyl-para-Chlorophenol	120-32-1	6.5
O-phenylphenol	90-43-7	6
Potassium hydroxide	1310-58-3	1-5
Isopropanol	67-63-0	5-10

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

Eye Contact	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/physician.
Skin Contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center or doctor/physician.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
Ingestion	Give two large glasses of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms and effects

Symptoms	Harmful if inhaled. Causes severe skin burns and eye damage. May be harmful if swallowed.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Dry chemical. Water.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor.

Hazardous Combustion Products Carbon oxides.

Explosion Data

Sensitivity to Static Discharge Take precautionary measures against static discharge.

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. Eliminate all ignition sources.

Environmental precautions

Environmental precautions Prevent runoff from entering drains, sewers or streams. 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. Dispose of contents/container to an approved waste disposal plant.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. 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. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only non-sparking tools. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep locked up and out of reach of children. Do not cut, weld, or puncture container. Do not contaminate water, food, or feed by storage or disposal.

Incompatible Materials Acids. Alkalis. Oxidizing agents. Chlorine.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene glycol 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³	-
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Isopropanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 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 Risk of contact: Wear approved safety goggles.

Skin and Body Protection Chemical resistant gloves. Suitable protective clothing.

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 thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Pleasant lemon fragrance
Appearance	Dark amber to purple liquid	Odor Threshold	Not determined
Color	Varies between dark amber and purple upon aging		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	12.5-14 (Conc.) 1:237 Dilution: 9.5-10.5	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	38.8 °C / 102 °F	Tag Closed Cup
Evaporation Rate	0.9	(Water = 1)
Flammability (Solid, Gas)	Liquid- Not Applicable	
Flammability Limits in Air		
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	1.07	
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

Keep out of reach of children.

Incompatible Materials

Acids. Alkalis. Oxidizing agents. Chlorine.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Inhalation	Harmful if inhaled.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Para-tertiary Amylphenol 80-46-6	= 1830 mg/kg (Rat)	= 2 g/kg (Rabbit)	-
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat) = 9530 µL/kg (Rabbit)	-
Ortho-benzyl-para-Chlorophenol 120-32-1	= 1700 mg/kg (Rat)	-	-
O-phenylphenol 90-43-7	= 2 g/kg (Rat)	> 2000 mg/kg (Rat)	> 0.949 mg/L (Rat) 1 h
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
Isopropanol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (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 The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested. Isopropyl Alcohol (IPA) is an IARC Monograph Group 3 chemical. IPA is a Group 1 when manufactured by the strong-acid process.

Chemical Name	ACGIH	IARC	NTP	OSHA
O-phenylphenol 90-43-7		Group 3		
Isopropanol 67-63-0		Group 3		X

Legend*IARC (International Agency for Research on Cancer)**Group 3 IARC components are "not classifiable as human carcinogens"**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
Para-tertiary Amylphenol 80-46-6		1.6: 96 h Cyprinus carpio mg/L LC50 1.87 - 3.34: 96 h Pimephales promelas mg/L LC50 flow-through	
Ethylene glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	40000 - 60000: 96 h Pimephales promelas mg/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 41000: 96 h Oncorhynchus mykiss mg/L LC50 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 16000: 96 h Poecilia reticulata mg/L LC50 static 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static	46300: 48 h Daphnia magna mg/L EC50
O-phenylphenol 90-43-7	0.85: 72 h Desmodemus subspicatus mg/L EC50	2.74: 96 h Lepomis macrochirus mg/L LC50 5.8: 96 h Poecilia reticulata mg/L LC50 static 2.75: 96 h Oncorhynchus mykiss mg/L LC50 3.4: 96 h Pimephales promelas mg/L LC50 flow-through	1 - 2.5: 48 h Daphnia magna mg/L EC50 Static
Potassium hydroxide 1310-58-3		80: 96 h Gambusia affinis mg/L LC50 static	
Isopropanol 67-63-0	1000: 96 h Desmodemus subspicatus mg/L EC50 1000: 72 h Desmodemus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50 11130: 96 h Pimephales promelas mg/L LC50 static	13299: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Ethylene glycol 107-21-1	-1.93
O-phenylphenol 90-43-7	3.18
Potassium hydroxide 1310-58-3	0.65 0.83
Isopropanol 67-63-0	0.05

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
Potassium hydroxide 1310-58-3	Toxic Corrosive
Isopropanol 67-63-0	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	UN2924
Proper Shipping Name	Flammable liquid, corrosive, n.o.s. (Isopropanol, Potassium hydroxide)
Hazard Class	3
Subsidiary Hazard Class	8
Packing Group	III

IATA

UN/ID No	UN2924
Proper Shipping Name	Flammable liquid, corrosive, n.o.s. (Isopropanol, Potassium hydroxide)
Hazard Class	3
Subsidiary Hazard Class	8
Packing Group	III

IMDG

UN/ID No	UN2924
Proper Shipping Name	Flammable liquid, corrosive, n.o.s. (Isopropanol, Potassium hydroxide)
Hazard Class	3
Subsidiary Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Para-tertiary Amylphenol	X	X	X	Present	X	Present	X	X
Ethylene glycol	X	X	X	Present	X	Present	X	X
Ortho-benzyl-para-Chlorophenol	X	X	X	Present	X	Present	X	X
O-phenylphenol	X	X	X	Present	X	Present	X	X
Potassium hydroxide	X	X	X	Present	X	Present	X	X
Isopropanol	X	X	X	Present	X	Present	X	X

Legend:*TSCA* - United States Toxic Substances Control Act Section 8(b) Inventory*DSL/NDL* - 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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethylene glycol 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Potassium hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Ethylene glycol - 107-21-1	107-21-1	1-10	1.0
O-phenylphenol - 90-43-7	90-43-7	6	1.0
Isopropanol - 67-63-0	67-63-0	5-10	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide	1000 lb			X

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Ethylene glycol - 107-21-1	Developmental
O-phenylphenol - 90-43-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene glycol 107-21-1	X	X	X
O-phenylphenol 90-43-7	X	X	X
Potassium hydroxide 1310-58-3	X	X	X
Isopropanol 67-63-0	X	X	X

EPA Pesticide Registration Number EPA Reg. No 3862-178-559**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

Causes irreversible eye damage and skin burns. Do not get in eyes, skin or on clothing. Wear protective eye wear, protective clothing, and rubber gloves. Harmful if swallowed. Avoid breathing (dust, 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 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 – inhalation	N/A	Harmful if inhaled
Skin corrosion/irritation	Causes skin burns	Causes severe skin burns
Serious eye damage/irritation	Causes irreversible eye damage	Causes serious eye damage
Skin sensitization	N/A	May cause an allergic skin reaction
Specific target organ toxicity (repeated exposure)	N/A	May cause damage to organs through prolonged or repeated exposure

16. OTHER INFORMATION**NFPA****Health Hazards**

3

Flammability

2

Instability

0

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical hazards

Not determined

Personal Protection

Not determined

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20-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