



Buckeye International, Inc.
 2700 Wagner Place
 Maryland Heights, MO 63043
 314/291-1900

N.F.P.A.

- 4 = Extreme
- 3 = High
- 2 = Moderate
- 1 = Slight
- 0 = Insignificant

	HEALTH	1
	FIRE	0
	REACTIVITY	0

Material Safety Data Sheet

24 Hour Medical Emergency Telephone Number: 1-800-303-0441 Outside North America call: 651-632-8956
 24 Hour Transportation Emergency Telephone Number: 1-800-535-5053 Outside North America call: 352-323-3500

SECTION I - IDENTIFICATION			
PRODUCT NAME	BUCKEYE BLUE		DATE PREPARED April 1, 2005
CHEMICAL FAMILY	All Purpose Cleaner, Water Based		CODE 5001
PROPER D.O.T. SHIPPING NAME	Compound, Cleaning, Liquid		
D.O.T. HAZARD CLASSIFICATION	None		
SECTION II - INGREDIENTS AND IDENTITY INFORMATION			
% BY WGT	MATERIAL	PEL	T.L.V.
Contains no Hazardous ingredients as listed by OSHA or EPA.			
All others are Trade Secret.			
ITEMS MARKED * ARE SARA TITLE III SEC 313 REPORTABLES. ALL INGREDIENTS ARE ON TSCA INVENTORY.			
SECTION III - PHYSICAL DATA			
BOILING POINT °F	212°F	pH (CONC.)	11.2 ± 0.2
SOLUBILITY IN WATER	Infinite	pH (USE DILUTION)	10.4 ± 0.2
% VOLATILE BY WEIGHT	88.0	EVAPORATION RATE (Water=1)	1.0
SPECIFIC GRAVITY	1.04	PRODUCT FORM	Liquid
APPEARANCE AND ODOR	Citrus, Clear Blue Solution		
SECTION IV - FIRE AND EXPLOSION DATA			
FLASH POINT (Test Method)	Tag Closed Cup: None	FLAMMABLE LIMITS	
EXTINGUISHING MEDIA	NA	UPPER LIMIT:	NA
SPECIAL FIRE FIGHTING PROCEDURES	None		
UNUSUAL FIRE AND EXPLOSION HAZARDS	Products of combustion. Oxides of carbon and nitrogen.		
SECTION V - REACTIVITY DATA			
STABILITY	Stable		
CONDITIONS TO AVOID	None known.		
INCOMPATIBILITY	Do not mix with chlorine bleach.		
HAZARDOUS DECOMPOSITION PRODUCTS	None known.		
HAZARDOUS POLYMERIZATION	Will not occur.		

CODE: 5001

SECTION VI - HEALTH HAZARD DATA	
ROUTE(S) OF ENTRY:	INHALATION? No SKIN? Yes INGESTION? No
HEALTH HAZARDS (Acute and Chronic)	
Moderate eye irritant. Not irritating to skin. Not toxic by ingestion.	
CARCINOGENICITY:	NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No
SIGNS AND SYMPTOMS OF OVEREXPOSURE	
For Eyes: Redness or burning sensation.	
MEDICAL CONDITIONS	
GENERALLY AGGRAVATED BY EXPOSURE	
Can cause defatting of skin tissue.	
EMERGENCY AND FIRST AID PROCEDURES	
For Eyes: Flush with cool water for 15 minutes. If irritation occurs and persists, see physician.	
For Ingestion: Give two large glasses of water. DO NOT induce vomiting. Call physician.	
Never give anything by mouth to an unconscious person.	
SECTION VII - SPILL OR LEAK PROCEDURES	
SPILL RESPONSE	
Pick up with mop, wet/dry vac or absorbent material. Rinse area with clear water and allow floor to dry before allowing traffic.	
WASTE DISPOSAL METHOD	
Flush to sanitary sewer or send to sanitary landfill, following local, state and federal laws.	
SECTION VIII - SPECIAL PROTECTION INFORMATION	
EYE PROTECTION	When eye contact may occur, wear safety glasses or chemical splash goggles.
VENTILATION	Normal room ventilation.
SKIN PROTECTION	Rubber gloves or other impervious gloves.
RESPIRATORY PROTECTION	None required.
OTHER PROTECTION	
Follow good personal hygiene practices.	
* Needed for clean up of spill or for possible prolonged skin contact.	
SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS IN HANDLING AND STORAGE	KEEP OUT OF REACH OF CHILDREN: Keep container closed when not in use. Store at room temperature.
OTHER PRECAUTIONS	This product is not regulated under CERCLA or RCRA. Not reportable under SARA Title III, Section 311/312.
NA = Not Applicable NE = Not Established	
PREPARED BY:	Mark Gindling, Director of Research
Disclaimer of Liability	
As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Conforms to OSHA 174, Sept. 1985.	



Buckeye International, Inc.
 2700 Wagner Place
 Maryland Heights, MO 63043
 314/291-1900

N. F. P. A.
 4 = Extreme
 3 = High
 2 = Moderate
 1 = Slight
 0 = Insignificant

	HEALTH	3
	FIRE	0
	REACTIVITY	0

Material Safety Data Sheet

24 Hour Medical Emergency Telephone Number: 1-800-303-0441. Outside North America call: 651-632-8956.
 24 Hour Transportation Emergency Telephone Number: 1-800-535-5053. Outside North America call: 352-323-3500.

SECTION I - IDENTIFICATION	
PRODUCT NAME	BUCKEYE TERMINATOR
CHEMICAL FAMILY	Cleaner Disinfectant, Water Based
PROPER D.O.T.	
SHIPPING NAME	Disinfectant, Liquid, NOIBN
D.O.T. HAZARD CLASSIFICATION	None
DATE PREPARED	April 1, 2005
CODE	5099

SECTION II - INGREDIENTS AND IDENTITY INFORMATION				
% BY WGT	MATERIAL	PEL	T.L.V.	C.A.S. NO.
5.5	Blend of n-Alkyl Dimethyl Benzyl and	NE	NE	68424-85-1
	Di-n-alkyl Dimethyl Ammonium Chlorides	NE	NE	68424-95-3
>87.5	Soft Water	NE	NE	7732-18-5
<3.0	Tetrasodium Ethylenediamine Tetraacetate	NE	NE	64-02-8
<3.0	Alkyloxypolyethyleneoxyethanol	NE	NE	84135-50-6
<1.0	Perfume, coloring and additives less than 1%	NA	NA	NA

ITEMS MARKED * ARE SARA TITLE III SEC 313 REPORTABLES. ALL INGREDIENTS ARE ON TSCA INVENTORY.

SECTION III - PHYSICAL DATA			
BOILING POINT * F	212°F	pH (CONC.)	12.0 ± 0.2
SOLUBILITY IN WATER	Infinite	pH (USE DILUTION) 1:64	10.0 ± 0.2
% VOLATILE BY WEIGHT	89.5%	EVAPORATION RATE (Water=1)	1.0
SPECIFIC GRAVITY	1.01	PRODUCT FORM	Liquid
APPEARANCE AND ODOR	Clear Green Solution, Mild Odor		

SECTION IV - FIRE AND EXPLOSION DATA			
FLASH POINT (Test Method)	Tag Closed Cup: None	FLAMMABLE LIMITS	
EXTINGUISHING MEDIA	NA	UPPER LIMIT:	NA
		LOWER LIMIT:	NA
SPECIAL FIRE FIGHTING PROCEDURES	None		
UNUSUAL FIRE AND EXPLOSION HAZARDS	Products of combustion. Oxides of carbon and nitrogen.		

SECTION V - REACTIVITY DATA	
STABILITY	Stable
CONDITIONS TO AVOID	None known
INCOMPATIBILITY	Do not mix with chlorine bleach or anionic detergents.
HAZARDOUS DECOMPOSITION PRODUCTS	None known.
HAZARDOUS POLYMERIZATION	Will not occur.

CODE: 5099

SECTION VI - HEALTH HAZARD DATA			
ROUTE(S) OF ENTRY:	INHALATION? No	SKIN? Yes	INGESTION? Yes
HEALTH HAZARDS (Acute and Chronic)			
Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through skin.			
CARCINOGENICITY:	NTP? No	IARC MONOGRAPHS? No	OSHA REGULATED? No
SIGNS AND SYMPTOMS OF OVEREXPOSURE			
For Eyes: Redness or burning sensation.		For Ingestion: Headache, nausea.	
For Skin: Redness of skin or a warming sensation.			
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE			
Dermatitis.			
EMERGENCY AND FIRST AID PROCEDURES:			
Call a poison control center or doctor for treatment advice.			
For Eyes and Skin: Rinse eyes or skin with plenty of water for 15 - 20 minutes.			
For Ingestion: Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.			
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.			
SECTION VII - SPILL OR LEAK PROCEDURES			
SPILL RESPONSE			
Pick up with mop, wet/dry vac or absorbent material. Rinse area with clear water and allow floor to dry before allowing traffic.			
WASTE DISPOSAL			
METHOD: Flush to sanitary sewer or send to sanitary landfill, following local, state and federal laws.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
EYE PROTECTION		VENTILATION	
Wear safety glasses or chemical splash goggles.		Normal room ventilation.	
SKIN PROTECTION		RESPIRATORY PROTECTION	
Rubber gloves and protective clothing.		None required.	
OTHER PROTECTION			
Wear water or chemical resistant footwear when scrubbing floors.			
Wash thoroughly with soap and water after handling.			
Remove contaminated clothing and wash clothing before reuse.			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS IN HANDLING AND STORAGE		KEEP OUT OF REACH OF CHILDREN!	
		Keep container closed when not in use.	
		Rinse container before discarding.	
OTHER PRECAUTIONS		Avoid food contamination	
NA = Not Applicable		This product is not regulated under CERCLA or RCRA.	
NE = Not Established		If more than 10,000 lbs. is stored in a single day, product may require reporting under SARA Title III, Section 311/312 as an immediate health hazard.	
PREPARED BY:		Mark Gindling, Director of Research	
Disclaimer of Liability			
As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material.			
Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Conforms to OSHA 174, Sept 1983.			



Spartan Chemical Company, Inc.

Material Safety Data Sheet

SECTION I: PRODUCT INFORMATION

Product Name or Number (as it appears on label):
GERMICIDAL BOWL CLEANSE
Product Number: 7120; 7570; 7102
Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee OH 43537

Product Division:
Janitorial

Product/Technical Information: 1-(800)-537-8990
Medical Emergency: 1-(888)-314-6171 (24 hours)
Chemical Leak/Spill Emergency: CHEMTREC 1-(800) 424-9300 (24 hours)

Shipping Description: Corrosive liquids, n.o.s., 8, UN 1760, III. (contains hydrochloric (muriatic) acid)	
NFPA Ratings:	HMSIS Ratings:
Health: 3 - Serious	Health: 3 - Serious
Fire: 0 - Minimal	Fire: 0 - Minimal
Reactivity: 0 - Minimal	Reactivity: 0 - Minimal
	Pers. Prot. Equip.: See Section VIII

SECTION II: HAZARDOUS INGREDIENTS

(Listed when present at 1% or greater, carcinogens at 0.1% or greater) All component chemicals are listed or exempted from listing on the "TSCA Inventory" of chemical substances maintained by the U.S. Environmental Protection Agency.

Chemical Name(s)	% W.	CAS Registry No.	Table Z-1-A			NTP, IARC or OSHA Carcinogen
			TWA mg/m ³	STEL mg/m ³	CEILING mg/m ³	
*Hydrochloric acid	20-25	7647-01-0	Not Established	Not Established	7 (3 ACGIH)	No

Comment: *This substance is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (SARA) and of 40 CFR 372.

SECTION III: PHYSICAL DATA

Boiling Point:	220 °F	Vapor Pressure:	Undetermined
Vapor Density (AIR =1):	Unknown	Solubility in Water:	Complete
pH:	<1	Specific Gravity (H ₂ O=1):	1.11
Evaporation Rate (but ace =1):	<1	Percent Solid by Weight:	<1
Physical State:	Liquid		
Appearance & Odor:	Milky white liquid, acid odor		

SECTION IV: FIRE & EXPLOSIVE HAZARD DATA

Flash Point:	> 220°F	Method Used:	ASTM-D56
Flammable Limits:	Not Established	Flame Extension:	N/A
Extinguishing Media:	Product does not support combustion. Use extinguishing media appropriate for surrounding fire.		
Special Fire Fighting Procedures:	Wear NIOSH approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.		
Unusual Fire & Explosive Hazards:	Combustion products are toxic. Acid action on most metals may release hydrogen, an explosive gas.		

SECTION V: HEALTH HAZARD DATA

Threshold Limit Value:	Not Established	Primary Routes of Entry:	Inhalation, Skin Contact, Eyes & Oral
Effects of Overexposure-Conditions to Avoid:	<p>CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN BURNS: Symptoms may include pain, redness, swelling and tissue damage. Harmful if absorbed through the skin.</p> <p>MAY BE FATAL IF SWALLOWED. Symptoms may include nausea, vomiting, pain and diarrhea.</p> <p>INHALATION OF SPRAY MIST MAY CAUSE RESPIRATORY HARM OR IRRITATION. Breathing spray mist may cause coughing and difficulty breathing.</p> <p>Do not get in eyes on skin or clothing. Do not swallow. Avoid breathing product mist.</p> <p>Wash thoroughly with soap and water after handling.</p>		
Conditions Aggravated by Use:	Use of this product may aggravate preexisting skin; eye and respiratory disorders including asthma and dermatitis.		

Emergency & First Aid Procedures:

Eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses after the first 5 minutes then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash contaminated clothing before reuse.
Ingestion:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Inhalation:	In case of respiratory irritation; move person to fresh air. If person is not breathing call 911 or an ambulance then give artificial respiration preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION VI: REACTIVITY DATA

Stability:	Stable	Incompatible Materials:	Strong alkalis; hypochlorites (bleach) ammonia; cyanides.
------------	--------	-------------------------	---

Hazardous Decomposition Products:	HCL, CO, CO ₂ H	Hazardous Polymerization:	Will Not Occur
-----------------------------------	----------------------------	---------------------------	----------------

SECTION VII: SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:	Dike and contain spill with inert material (sand, earth, commercial absorbent, etc.) and transfer to containers for disposal. Rinse area with water and flush to sanitary sewer. Keep spill out of storm sewers and waterways.
Waste Disposal Method:	Dispose of in compliance with all federal, state and local laws and regulations.

SECTION VIII: SPECIAL PROTECTION INFORMATION

Respiratory Protection:	Not normally required when good general ventilation is provided. However, if exposure limits (see Section II) are exceeded or respiratory irritation occurs, use of a NIOSH approved respirator suitable for the use conditions and chemicals in Section II should be considered.
Ventilation:	Provide good general ventilation. Local exhaust ventilation may be necessary for some operations.
Protective Gloves (Specify Type):	Rubber or neoprene gloves are recommended.
Eye Protection (Specify Type):	Splash goggles are recommended to prevent eye contact.
Other Protective Equipment:	Acid resistant aprons and boots are recommended where body or foot contact is likely. Eye wash stations and washing facilities should be readily accessible. See 29 CFR 1910.132-138.

SECTION IX: SPECIAL PRECAUTIONS

Precautions; Handling & Storing:	Do not contaminate water, food or feed by storage or disposal. Keep from freezing. Do not use with other chemicals. Mixtures of this product with other chemicals, particularly those containing chlorine bleach or ammonia may result in the production of toxic gases, fire or explosion.
Other Precautions:	Keep out of reach of children.

© SCC 06/01/2007
GERMICIDAL BOWL
CLEANSE

Name: Ronald T. Cook
Effective: 06/01/2007
Date:
Changes: Update Section II

Title: Manager, Regulatory Affairs
Supersedes: 07/06/2006

Ref: 29 CFR 1910.1200
(OSHA)

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond sellers control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State and Local laws and regulations.



Spartan Chemical Company, Inc.

Material Safety Data Sheet

SECTION I: PRODUCT INFORMATION

Product Name or Number (as it appears on label): **BIORENEWABLES GLASS CLEANER (RTU HANDI SPRAY)** Product Division: **Janitorial**

Product Number: **3239**

Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee OH 43537

Product/Technical Information: **1-(800)-537-8990**

Medical Emergency: **1-(888)-314-6171 (24 hours)**

Chemical Leak/Spill Emergency: **CHEMTREC 1-(800) 424-9300 (24 hours)**

Shipping Description: Cleaning compounds, liquid, n.o.s.	
NFPA Ratings:	HMIS Ratings:
Health: 0 - Minimal	Health: 0 - Minimal
Fire: 0 - Minimal	Fire: 0 - Minimal
Reactivity: 0 - Minimal	Reactivity: 0 - Minimal
	Pers. Prot. Equip.: See Section VIII

SECTION II: HAZARDOUS INGREDIENTS

(Listed when present at 1% or greater, carcinogens at 0.1% or greater) All component chemicals are listed or exempted from listing on the "TSCA Inventory" of chemical substances maintained by the U.S. Environmental Protection Agency.

Chemical Name(s)	% W	CAS Registry No.	Table Z-1-A			NTP, IARC or OSHA Carcinogen
			TWA mg/m ³	STEL mg/m ³	CEILING mg/m ³	
Alkyl polyglycoside	< 1.0	132778-08-6	Not Established	Not Established	Not Established	No

SECTION III: PHYSICAL DATA

Boiling Point:	212 °F	Vapor Pressure:	Not determined
Vapor Density (AIR = 1):	Unknown	Solubility in Water:	Complete
pH:	7.5-8.5	Specific Gravity (H ₂ O=1):	1.00
Evaporation Rate (but. acc.=1):	<1	Percent Solid by Weight:	<1.0
Physical State:	Liquid		
Appearance & Odor:	Light blue liquid, pleasant fragrance		

▼ SECTION IV: FIRE & EXPLOSIVE HAZARD DATA

Flash Point:	> 212°F	Method Used:	ASTM-D56
Flammable Limits:	Not Established	Flame Extension:	N/A
Extinguishing Media:	Product does not support combustion. Use extinguishing media appropriate for surrounding fire.		
Special Fire Fighting Procedures:	Wear NIOSH approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.		
Unusual Fire & Explosive Hazards:	Combustion products are toxic.		

▼ SECTION V: HEALTH HAZARD DATA

Threshold Limit Value:	Not Established	Primary Routes of Entry:	Inhalation, Skin Contact, Eyes and Oral
Effects of Overexposure-Conditions to Avoid:	May cause mild eye and skin irritation. May be harmful if swallowed. Inhalation of product mist may cause respiratory irritation. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Do not swallow. Avoid breathing product mist. Wash thoroughly after handling.		
Conditions Aggravated by Use:	Use of this product may aggravate preexisting skin, eye and respiratory disorders including asthma and dermatitis.		

Emergency & First Aid Procedures:

Eyes:	Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses. Get medical attention.
Skin:	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists. Wash contaminated clothing before reuse.
Ingestion:	Do not induce vomiting unless told to do so by medical personnel. Drink one or two glasses of water to dilute product. Get medical attention. Do not give anything by mouth to an unconscious person.
Inhalation:	In case of respiratory irritation, move person to fresh air. Get medical attention if irritation persists.

▼ SECTION VI: REACTIVITY DATA

Stability:	Stable	Incompatible Materials:	Strong oxidizers
Hazardous Decomposition Products:	CO, CO2	Hazardous Polymerization:	Will Not Occur

▼ SECTION VII: SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:	Flush with plenty of water into sanitary sewer.
Waste Disposal Method:	Same as above.

SECTION VIII: SPECIAL PROTECTION INFORMATION

Respiratory Protection:	None required
Ventilation:	Provide good general ventilation. Local exhaust ventilation may be necessary for some operations.
Protective Gloves (Specify Type):	Not required. Impervious gloves may be worn if desired.
Eye Protection (Specify Type):	Not required. Splash goggles may be worn if desired.
Other Protective Equipment:	See 29 CFR 1910.132-138 for further guidance.

SECTION IX: SPECIAL PRECAUTIONS

Precautions; Handling & Storing:	Keep out of reach of children
Other Precautions:	Keep from freezing.

© SCC 06/15/2007 Name: Ronald T. Cook Title: Manager, Regulatory Affairs
 BIORENEWABLES GLASS Effective 06/15/2007
 CLEANER (RTU HANDI Date:
 SPRAY)
 Ref: 29 CFR 1910.1200 Changes: New Product
 (OSHA)

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond sellers control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State and Local laws and regulations.