

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Green Klean® – Bleach Tablets
UN-No	UN2465

Recommended Use	Bleach.
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Supplier Address SOP Green Klean® 615 Industrial Dr, Suite D Cary, IL 60013 Phone: 815-479-0460 Contact: Bill Becker / Frank Terranova- Technical needs Contact Phone: 815-479-0460 Fax 815-479-0461 Emergency Phone: 610-551-9500 24 hr Day	
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Company Emergency Phone Number	610-551-9500 24hr.
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2. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

Oxidizer
Harmful if swallowed
Irritating to eyes if not flushed with potable water and checked by physician
Irritating to skin

Appearance White

Physical State Solid, Solid, powder.

Odor Chlorine

Potential Health Effects

Principle Routes of Exposure

Eye contact. Skin contact.

Acute Toxicity

Eyes

Risk of serious damage to eyes.

Skin

Irritating to skin.

Inhalation

Irritating to respiratory system.

Ingestion

Harmful if swallowed. Ingestion may cause irritation to mucous membranes.

Chronic Effects

No known effect based on information supplied.

Aggravated Medical Conditions

None known.

Environmental Hazard

See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Sodium dichloroisocyanurate dihydrate	51580-86-0	25-100
Citric acid monohydrate	5949-29-1	1-10
Sodium carbonate	497-19-8	1-10

4. FIRST AID MEASURES		
	Eye Contact	In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Call a physician immediately.
	Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
	Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. If symptoms persist, call a physician.
	Ingestion	Call a physician immediately. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Drink plenty of water.
	Notes to Physician	Keep victim warm and quiet. Treat symptomatically.
	Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES					
Flammable Properties	Oxidizer.				
Flash Point	Not determined.				
Suitable Extinguishing Media	Use water. Do not use dry chemicals or foams. CO ₂ or Halon may provide limited control. Flood fire area with water from a distance. Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out.				
Uniform Fire Code	<ul style="list-style-type: none"> • Irritant: Solid • Oxidizer: Class 2--Solid 				
	<i>This product contains a Class 2 Oxidizer as defined by the Uniform Fire Code</i>				
Hazardous Combustion Products	Chlorine compounds. Carbon oxides.				
Explosion Data					
	<table border="1"> <tr> <td>Sensitivity to Mechanical Impact</td> <td>No.</td> </tr> <tr> <td>Sensitivity to Static Discharge</td> <td>No.</td> </tr> </table>	Sensitivity to Mechanical Impact	No.	Sensitivity to Static Discharge	No.
Sensitivity to Mechanical Impact	No.				
Sensitivity to Static Discharge	No.				
Specific Hazards Arising from the Chemical These substances will accelerate burning when involved in a fire. Some may decompose explosively when heated or involved in a fire. May ignite combustibles (wood paper, oil, clothing, etc.). Runoff may create fire or explosion hazard.					
Protective Equipment and Precautions for Firefighters Do not move cargo or vehicle if cargo has been exposed to heat. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. ALWAYS stay away from tanks engulfed in fire. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.					

NFPA	
	Health Hazard 3
	Flammability 0
	Stability 1
	Physical and Chemical Hazards OX

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk.
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Refer to protective measures listed in Sections 7 and 8.
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Use personal protective equipment. Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.
Other Information	Keep combustibles (wood, paper, oil, etc) away from spilled material. DO NOT GET WATER INSIDE CONTAINERS.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Do NOT mix with acids Keep away from clothing and other combustible materials
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children. Oxidizers must be separated from flammables by at least 20 feet (or fire wall).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.	
Engineering Measures	Showers Eyewash stations Ventilation systems	
Personal Protective Equipment	Eye/Face Protection	Tightly fitting safety goggles.
	Skin and Body Protection	Protective gloves.
	Respiratory Protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White.	
Odor	Chlorine.	
Odor Threshold	No information available.	
pH	No information available	
Flash Point	No information available.	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Boiling Point/Range	No information available	
Melting Point/Range	No information available	
Flammability Limits in Air	No information available	
Explosion Limits	No information available	

Water Solubility	Soluble in water.	
Solubility	No information available	
Evaporation Rate	No information available	
Vapor Pressure	No data available	
Vapor Density	No data available	
VOC Content (%)	Not applicable	
Partition Coefficient: n-octanol/water		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.	
Incompatible Products	Acids. Take any precaution to avoid mixing with combustibles Reducing agents. Ammonia. Urea Water.	
Conditions to Avoid	Protect from moisture	
Hazardous Decomposition Products	Chlorine. Carbon oxides.	
Hazardous Polymerization	Hazardous polymerization does not occur.	

11. TOXICOLOGICAL INFORMATION

Acute Toxicity			
Product Information			
LD50 Oral VALUE	1420		
LD50 Dermal VALUE	6250 mg/kg (rat) estimated		
LC50 Inhalation (DUST) VALUE			
LC50 Inhalation (VAPOR) VALUE			
Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium dichloroisocyanurate dihydrate	= 735 mg/kg (Rat)	> 2000 mg/kg (Rabbit) > 5000 mg/kg (Rat)	> 50 mg/L (Rat) 1 h
Citric acid monohydrate	= 3000 mg/kg (Rat)	-	-
Sodium carbonate	= 4090 mg/kg (Rat)	-	-

Chronic Toxicity			
Chronic Toxicity		No known effect based on information supplied.	
Target Organ Effects		None known.	
Endocrine Disruptor Information		.	
Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Sodium dichloroisocyanurate dihydrate	Group III Chemical		

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated. Contains a substance which is: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium dichloroisocyanurate dihydrate		LC50: 0.25-1 mg/L (96 h static) Lepomis macrochirus LC50: 0.13-0.36 mg/L (96 h static) Oncorhynchus mykiss LC50: 0.207-0.389 mg/L (96 h flow-through) Lepomis macrochirus LC50: 0.176-0.267 mg/L (96 h flow-through) Oncorhynchus mykiss LC50: 0.29 mg/L (96 h) Oncorhynchus mykiss		EC50: 0.00018 - 0.00021 mg/L (48 h) Daphnia magna EC50: 0.093 - 0.16 mg/L (48 h) Daphnia magna
Citric acid monohydrate		LC50: 1516 mg/L (96 h static) Lepomis macrochirus		EC50: 120 mg/L (72 h) Daphnia magna
Sodium carbonate	EC50: 242 mg/L (120 h) Nitzschia	LC50: 300 mg/L (96 h static) Lepomis macrochirus LC50: 310 - 1220 mg/L (96 h static) Pimephales promelas		EC50: 265 mg/L (48 h) Daphnia magna

Chemical Name	Log Pow
Citric acid monohydrate	-1.72

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
Contaminated Packaging	Dispose of in accordance with local regulations.

US EPA Waste Number	D001
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California Hazardous Waste Codes	141
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This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California EHW	California Carc	California Hazardous Waste	California Waste - Part 2
Sodium dichloroisocyanurate dihydrate			Ignitable	
Sodium carbonate			Corrosive	

14. TRANSPORT INFORMATION

<u>DOT</u>		
	UN-No	UN2465
	Proper Shipping Name	Dichloroisocyanuric acid, dry
	Hazard Class	5.1
	Subsidiary Class	
	Packing Group	II
	Description	UN2465,Dichloroisocyanuric acid, dry, 5.1,PG II
	Emergency Response Guide Number	140
<u>TDG</u>		
	UN-No	UN2465
	Proper Shipping Name	Dichloroisocyanuric acid, dry
	Hazard Class	5.1
	Packing Group	II
	Description	UN2465,DICHLOROISOCYANURIC ACID, DRY,5.1,PG II
<u>MEX</u>		
	UN-No	UN2465
	Proper Shipping Name	Dichloroisocyanuric acid, dry
	Hazard Class	5.1
	Packing Group	II
	Description	UN2465 Dichloroisocyanuric acid, dry, 5.1,II
<u>ICAO</u>		
	UN-No	UN2465
	Proper Shipping Name	Dichloroisocyanuric acid, dry
	Hazard Class	5.1
	Packing Group	II
	Description	UN2465,Dichloroisocyanuric acid, dry, 5.1,PG II
<u>IATA</u>		
	UN-No	UN2465
	Proper Shipping Name	Dichloroisocyanuric acid, dry
	Hazard Class	5.1
	Packing Group	II
	ERG Code	5L
	Description	UN2465,Dichloroisocyanuric acid, dry, 5.1,PG II
<u>IMDG/IMO</u>		
	UN-No	UN2465
	Proper Shipping Name	Dichloroisocyanuric acid, dry
	Hazard Class	5.1
	Packing Group	II
	EmS No.	F-A, S-Q
	Marine Pollutant	Product is a marine pollutant according to the criteria set by IMDG/IMO
	Description	UN2465, Dichloroisocyanuric acid, dry, 5.1,PG II
<u>RID</u>		
	UN-No	UN2465
	Proper Shipping Name	Dichloroisocyanuric acid, dry

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Does not Comply
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply
IECSC	Complies
KECL	Does not Comply
PICCS	Complies
AICS	Complies

U.S. Federal Regulations

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.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	Yes

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium dichloroisocyanurate dihydrate	X	X	X		X
Sodium sulfate	X		X		

International Regulations

Mexico - Grade

Slight risk, Grade 1

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

C Oxidizing materials

D1B Toxic materials

D2B Toxic materials

16. OTHER INFORMATION

Issuing Date

25-Apr-2011

Revision Date

25-Apr-2011

Revision Note

No information available

General 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