

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	<b>Ship Shape Ultra Concentrated Bleach Tablets- Original Scent</b>
<b>UN-No</b>	UN2465
	For King Research, Inc.

<b>Recommended Use</b>	Bleach.
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<b>Supplier Address</b> King Reseach 7025 West Marcia Rd. Milwaukee, WI 53223 Phone: 610-551-9500 Contact: Frank Terranova- Technical needs Contact Phone: 610-551-9500; 219-324-0800 Fax 219-324-0805; 574-358-0095 Emergency Phone: 610-551-9500 24 hr Day 219-324-0800
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<b>Company Emergency Phone Number</b>	610-551-9500 24 hr; 219-324-0800 Day
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## 2. HAZARDS IDENTIFICATION

### WARNING!

### Emergency Overview

Oxidizer  
Risk of serious damage to eyes  
Harmful if swallowed  
Irritating to eyes  
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	60-100
Citric acid monohydrate	5949-29-1	1-10
Sodium Bicarbonate	144-55-8	1-10

### 4. FIRST AID MEASURES

	<b>Eye Contact</b>	In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Call a physician immediately.
	<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
	<b>Inhalation</b>	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.
	<b>Ingestion</b>	Call a physician immediately. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Drink plenty of water.
	<b>Notes to Physician</b>	Keep victim warm and quiet. Treat symptomatically.
	<b>Protection of First-aiders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Oxidizer.
<b>Flash Point</b>	Not determined.
<b>Suitable Extinguishing Media</b>	Use water. Do not use dry chemicals or foams. CO <sub>2</sub> 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.
<b>Uniform Fire Code</b>	<ul style="list-style-type: none"><li>• Irritant: Solid</li><li>• Oxidizer: Class 2--Solid</li></ul>
	<i>This product contains a Class 2 Oxidizer as defined by the Uniform Fire Code</i>
<b>Hazardous Combustion Products</b>	Chlorine compounds. Carbon oxides.

<b>Explosion Data</b>	<b>Sensitivity to Mechanical Impact</b>	No.
	<b>Sensitivity to Static Discharge</b>	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.

<b>NFPA</b>	<b>Health Hazard</b> 3
	<b>Flammability</b> 0
	<b>Stability</b> 1
	<b>Physical and Chemical Hazards</b> OX

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk.
<b>Environmental Precautions</b>	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.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Cleaning Up</b>	Use personal protective equipment. Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.
<b>Other Information</b>	Keep combustibles (wood, paper, oil, etc) away from spilled material. DO NOT GET WATER INSIDE CONTAINERS.

### 7. HANDLING AND STORAGE

<b>Handling</b>	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
<b>Storage</b>	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

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Measures</b>	Showers Eyewash stations Ventilation systems

<b>Personal Protective Equipment</b>		
	<b>Eye/Face Protection</b>	Tightly fitting safety goggles.
	<b>Skin and Body Protection</b>	Protective gloves.
	<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

<b>Hygiene Measures</b>	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.
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White.	
	<b>Odor</b>	Chlorine.
<b>Odor Threshold</b>	No information available.	
	<b>Physical State</b>	Solid Solid, powder
<b>pH</b>	No information available	
<b>Flash Point</b>	No information available.	
	<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	No information available	
	<b>Boiling Point/Range</b>	No information available
<b>Melting Point/Range</b>	No information available	
<b>Flammability Limits in Air</b>	No information available	
<b>Explosion Limits</b>	No information available	

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

## 10. STABILITY AND REACTIVITY

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

## 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity</b>	
<b>Product Information</b>	

<b>LD50 Oral VALUE</b>	1420		
<b>LD50 Dermal VALUE</b>	6250 mg/kg (rat) estimated		
<b>LC50 Inhalation (DUST) VALUE</b>			
<b>LC50 Inhalation (VAPOR) VALUE</b>			
<b>Chemical Name</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
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 Bicarbonate	4220 mg/kg (Rat)	-	-

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

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>
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 Bicarbonate	EC50: 650 mg/L (120 h ) Nitzschia linearis	LC50: 8250-9000 mg/L (96 h static) Lepomis macrochirus		EC50: 2350 mg/L (48 h ) Daphnia magna

<b>Chemical Name</b>	<b>Log Pow</b>
Citric acid monohydrate	-1.72

### 13. DISPOSAL CONSIDERATIONS

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

<b>US EPA Waste Number</b>	D001
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<b>California Hazardous Waste Codes</b>	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		

## 14. TRANSPORT INFORMATION

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<b>DOT</b>		
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	
<b>TDG</b>		
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	
<b>MEX</b>		
UN-No	UN2465	
Proper Shipping Name	Dichloroisocyanuric acid, dry	
Hazard Class	5.1	
Packing Group	II	
Description	UN2465 Dichloroisocyanuric acid, dry, 5.1, II	
<b>ICAO</b>		
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	
<b>IATA</b>		
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	
<b>IMDG/IMO</b>		
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	
<b>RID</b>		
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**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	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

<b>Issuing Date</b>	25-Aug-2014
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<b>Revision Date</b>	25-Aug-2014
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<b>Revision Note</b>	No information available
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**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**